

# A Complete Bibliography of Publications in *IMA Journal of Numerical Analysis*

Nelson H. F. Beebe  
University of Utah  
Department of Mathematics, 110 LCB  
155 S 1400 E RM 233  
Salt Lake City, UT 84112-0090  
USA

Tel: +1 801 581 5254

FAX: +1 801 581 4148

E-mail: [beebe@math.utah.edu](mailto:beebe@math.utah.edu), [beebe@acm.org](mailto:beebe@acm.org),  
[beebe@computer.org](mailto:beebe@computer.org) (Internet)

WWW URL: <http://www.math.utah.edu/~beebe/>

29 April 2019

Version 1.74

## Title word cross-reference

$(k, l)$  [332, 333].  $-1$  [1079].  $1$  [372, 388, 430, 1040, 1155].  $1/x$  [279].  $10$  [847].  $2$  [448, 716, 1031, 1174].  $3$  [55, 188, 266, 635, 942, 1082, 1169, 1301, 1429].  $4$  [39].  $[1, \infty)$  [279].  $A$  [952, 1561].  $\alpha$  [1393].  $ap$  [1288].  $AX + YB = C$  [1655].  $B$  [850].  $\mathbf{R}^3$  [1002].  $H(\text{div})$  [1263, 1264].  $C^0$  [412, 219, 290].  $C^1$  [1356, 1475].  $C^2$  [542, 1169, 1357].  $C_1$  [1279].  $\mathcal{F}$  [527].  $\mathcal{Z}$  [477].  $\chi$  [7].  $D$  [130, 166, 1450].  $\text{DG}(p)$  [878].  $dG(s)$  [742].  $\epsilon$  [877, 1505].  $G^1$  [676].  $G^2$  [676].  $\gamma$  [1099].  $H$  [910, 1342, 1362, 1578, 522, 530, 1484].  $H(\text{div})$  [843, 1083].  $H^1$  [740, 1278, 512, 1063, 1312, 1531].  $H^2$  [422, 512].  $H^s(0, L)$  [143].  $H_1$  [631].  $H_\infty$  [1238].  $H_p^\Lambda(I^d)$  [753].  $hp$  [1261, 358, 759, 1214, 1215, 1213].  $k$  [528].  $l$  [500].  $L(L^2)$  [567].  $L^2$  [364, 585, 1113, 148, 819].  $L^2(H_\gamma^1)$  [975].  $L^\infty(L^2)$  [757].  $L^\infty(L^\infty)$  [878, 879].  $L_1$  [982, 1584, 1330, 1348, 1586, 1591, 1623, 1655].  $L_2$  [348, 740, 1062, 489, 1590].  $l_\infty$  [1348].  $L_p$  [1085, 1184, 1185, 1585].  $\lambda$  [763].  $LDL^T$  [1377, 782, 527].  $LR$  [840].  $LU$  [972, 1005, 1487].  $M$  [453, 452, 833].  $A - \varphi$  [484].  $T - \Omega$  [484].  $\mathcal{H}$  [682].  $P$  [406, 407, 465, 968, 56, 186, 221, 555, 858, 879, 1167, 1390, 1419, 1484].  $p(x)$  [539].  $Q$  [1638, 1322].  $qd$  [840].  $QR$  [391, 921].  $R$  [495].  $R^3$  [1199].  $\Re$  [884].  $rp$  [1288].  $S$  [709].  $T$  [727].  $\theta$  [1011, 384, 827, 826, 1123, 1135, 1542].  $V$

[1613].  $\varphi$  [1606].  $\vartheta$  [1010].  $W(a, x)$  [767].  
 $W^{1, \infty}$  [532].  $X$  [322, 1180, 1468].  
 $x^{(i+1)} = Px^{(i)} + q$  [94].  $XY = A$  [1654].  
 $y'' = f(t, y)$  [406, 407].  $y' = f(x, y)$  [464].  
 $y' = f(x, y)$  [465].  $y'' = f(x, y)$  [847].  
 $y'' = f(x, y)$  [462, 463].  $z$  [313, 1183, 1308].  
 $z^{-1}$  [313, 1183, 1308].  $Z_2$  [970].  $|\epsilon|$  [1].

**-acceptability** [952]. **-algebraic** [332, 333].  
**-algorithm** [1505]. **-approximation** [1085].  
**-approximations** [1011]. **-BEM** [221].  
**-Bernstein** [1322]. **-boundedness**  
[879, 878]. **-condition** [1099]. **-conforming**  
[717, 1083]. **-convergence** [532]. **-Cycle**  
[1613]. **-decompositions** [453, 452, 1005].  
**-elliptic** [910, 522]. **-error** [567, 757].  
**-factorization** [527]. **-functions** [1606].  
**-Galerkin** [1312]. **-Hessian** [716]. **-interior**  
[290]. **-Laplacian** [56, 186, 539]. **-linear**  
[495]. **-matrices** [1578]. **-matrix**  
[682, 727, 833]. **-method** [7]. **-methods**  
[1123, 1135, 1542, 384, 827, 826]. **-narrow**  
[530]. **-norm** [422, 819]. **-norms** [1390].  
**-order** [1638]. **-part** [528]. **-partitions**  
[130]. **-projection** [740]. **-rational** [763].  
**-scheme** [1010]. **-series** [850]. **-solutions**  
[879, 1655]. **-spline** [1180, 1468]. **-splines**  
[322, 1279]. **-stability** [465, 740]. **-stable**  
[406, 407, 968, 1561]. **-structure** [555, 1167].  
**-symmetry** [970]. **-transform** [477].  
**-transformation** [1450]. **-triangulation**  
[1393]. **-type** [709, 527]. **-uniform** [877].  
**-uniformly** [1]. **-version**  
[759, 858, 1261, 1419]. **-weighted** [1362].

**17** [1482].

**2** [187, 1165]. **26** [73].

**31** [1618]. **3D** [1528].

**5** [407, 622].

**65130** [462].

**7** [576].

**83d** [1165]. **86d** [622]. **87c** [407].

**9** [462]. **90d** [576]. **90i** [462]. **98d** [1482].

**Abel** [351, 1138, 1139]. **abscissa**  
[1209, 1210]. **absolute**  
[1021, 1191, 1644, 1544]. **absorbing** [1163].  
**abstract** [235]. **Accelerated** [127].  
**accelerating** [935]. **Acceleration**  
[1081, 295, 938, 950, 1191, 1192].  
**accelerator** [624]. **acceptability** [952].  
**accretive** [248, 249]. **accumulation** [437].  
**Accuracy** [1265, 111, 406, 407, 877, 955,  
973, 1120, 1216, 1460]. **Accurate**  
[523, 572, 651, 700, 767, 791, 942, 1156, 1260,  
1285, 1507, 1508, 1568, 1641, 1650]. **achieve**  
[547]. **acoustic**  
[201, 225, 260, 727, 1025, 1026, 1082, 1400].  
**active** [238]. **Adams** [856]. **Adams-type**  
[856]. **adapted** [1117]. **Adaptive**  
[95, 354, 503, 535, 645, 694, 1019, 1284, 1504,  
38, 45, 186, 190, 197, 345, 367, 373, 408, 475,  
505, 569, 599, 649, 660, 730, 731, 741, 742,  
914, 984, 1050, 1051, 1070, 1071, 1157, 1220,  
1451, 1608, 1653]. **addition** [686].  
**additional** [224, 1247]. **Additive** [861, 1419,  
96, 440, 884, 1009, 1134, 1246, 1575, 1624].  
**additively** [401]. **ADER** [1517].  
**ADER-WAF** [1517]. **adhesion** [499, 760].  
**ADI** [1314]. **adjoint**  
[267, 1095, 1178, 1430, 1490, 1570].  
**advected** [1058]. **advection** [620, 637, 647,  
721, 1227, 1287, 1460, 1527, 1592].  
**advection-diffusion** [1227, 1287].  
**advective** [1057]. **adverse** [252]. **Afem**  
[375]. **affine** [1281]. **after** [493]. **aggregated**  
[1485]. **aid** [1413]. **Ale** [1156, 1044].  
**Ale-Fem** [1156]. **algebra** [1536]. **algebraic**  
[147, 332, 333, 350, 383, 470, 718, 788, 820,  
834, 1031, 1104, 1112, 1301, 1404, 1429, 1452,  
1454, 1503]. **algebraically** [471]. **algorithm**  
[255, 258, 273, 325, 326, 373, 380, 423, 428,

482, 518, 556, 581, 643, 650, 659, 667, 681, 752, 783, 789, 868, 906, 920, 921, 930, 1027, 1168, 1190, 1247, 1318, 1339, 1344, 1505, 1554, 1560, 1584, 1590, 1603, 1611, 1626, 1639].

**Algorithms** [557, 1218, 1244, 51, 52, 75, 199, 475, 513, 553, 607, 639, 641, 745, 816, 834, 840, 1081, 1219, 1224, 1358, 1361, 1386, 1456, 1470, 1484, 1520, 1528, 1610, 1606, 1637, 1638, 1648].

**alignment** [49]. **Allen** [155, 238, 689, 802].

**alloy** [152, 153, 154, 240, 1020]. **alloys** [1635]. **alpha** [536]. **Alternate** [509, 1224, 1225]. **alternating** [232, 312, 409, 449, 448, 779, 1376]. **Ampère** [108]. **Anal** [407, 462, 576, 622, 1165, 1482].

**analyses** [171, 397, 861]. **Analysis** [18, 244, 246, 272, 311, 421, 433, 493, 511, 586, 668, 687, 689, 688, 735, 822, 855, 886, 929, 1014, 1087, 1114, 1154, 1374, 1379, 1517, 1618, 2, 5, 30, 43, 76, 77, 85, 120, 133, 144, 146, 187, 191, 204, 211, 207, 214, 228, 236, 238, 240, 262, 287, 288, 293, 343, 349, 351, 366, 370, 378, 416, 429, 466, 488, 513, 563, 570, 608, 615, 617, 620, 629, 639, 638, 630, 635, 631, 636, 641, 648, 1377, 691, 721, 727, 738, 746, 747, 766, 820, 893, 912, 926, 925, 965, 970, 969, 981, 982, 983, 1025]. **analysis** [1026, 1039, 1045, 1049, 1050, 1065, 1091, 1083, 1092, 1100, 1130, 1131, 1138, 1153, 1157, 1155, 1172, 1178, 1203, 1206, 1251, 1272, 1275, 1279, 1283, 1288, 1358, 1370, 1371, 1392, 1430, 1501, 1570, 1576, 1611, 1613, 1607, 1610, 1615, 1627, 1634, 1643, 1651, 944, 945, 1549].

**Analytic** [1540, 35, 46, 987, 1333, 1381].

**analytical** [8, 147, 828]. **Andrew** [814].

**angles** [193]. **Anisotropic** [415, 81, 165, 167, 552, 647, 653, 654, 772, 802, 1062, 1063, 1126, 1613, 1640]. **annulus** [313, 1183, 1308]. **any** [653]. **AOR** [1578].

**apertures** [885]. **Application** [423, 82, 195, 247, 357, 382, 396, 408, 426, 549, 660, 662, 908, 918, 1004, 1110, 1212, 1266, 1554].

**applications** [77, 79, 91, 126, 130, 312, 318, 428, 799, 796, 825, 1147, 1386, 1462, 1501, 1510, 1617, 1618].

**applied** [83, 129, 197, 411, 712, 797, 881, 1056, 1111, 1116, 1194, 1259, 1409, 1578].

**appraisal** [1307]. **approach** [45, 83, 503, 563, 565, 663, 749, 841, 954, 1233, 1234, 1263, 1264, 1283, 1300, 1299, 1362, 1508, 1521, 1534, 1658, 501].

**approximants** [682]. **approximate** [150, 342, 417, 452, 540, 625, 652, 866, 914, 1035, 1195]. **approximated** [434, 483].

**Approximating** [830, 1118, 538, 517, 1238, 1386, 1490, 1606].

**Approximation** [78, 201, 279, 287, 303, 810, 854, 853, 882, 897, 1223, 1438, 1620, 4, 13, 20, 24, 21, 25, 40, 53, 56, 79, 111, 121, 142, 160, 162, 163, 164, 158, 152, 153, 154, 155, 151, 165, 170, 166, 156, 157, 172, 174, 175, 178, 189, 209, 248, 249, 251, 257, 267, 283, 296, 316, 317, 344, 363, 364, 377, 382, 383, 427, 436, 438, 461, 467, 480, 489, 544, 555, 567, 587, 605, 627, 632, 634, 653, 666, 701, 704, 715, 726, 744, 760, 761, 780, 880, 895, 899, 911, 931, 935, 936, 941, 961].

**approximation** [962, 987, 999, 1015, 1055, 1058, 1075, 1085, 1109, 1125, 1147, 1331, 1157, 1173, 1242, 1255, 1269, 1278, 1295, 1306, 1329, 1332, 1370, 1372, 1384, 1399, 1410, 1444, 1493, 1508, 1530, 1559, 1584, 1585, 1586, 1589, 1595, 1598, 1600, 1608, 1624, 1629].

**approximations** [11, 38, 109, 117, 167, 169, 168, 179, 288, 307, 308, 361, 462, 463, 512, 523, 624, 633, 703, 721, 723, 756, 757, 754, 778, 824, 952, 980, 1009, 1012, 1011, 1013, 1060, 1068, 1093, 1094, 1105, 1153, 1184, 1185, 1195, 1241, 1284, 1285, 1303, 1313, 1378, 1405, 1415, 1421, 1433, 1450, 1467, 1483, 1522, 1529, 1528, 1531, 1581, 1602, 1656, 524].

**Arbitrarily** [1420]. **Arbitrary** [552, 118, 533, 674, 713, 781, 882, 1132, 1144, 502].

**Arbitrary-order** [552]. **arcs** [1628].

**arguments** [1272]. **arising** [31, 29, 296, 343, 632, 683, 785, 820, 846, 909,

919, 1028, 1112, 1313, 1354]. **arithmetic** [1289, 1290, 1444]. **Arnold** [364]. **Aronszajn** [660]. **aspects** [1412]. **asserting** [1554]. **assets** [922]. **associated** [51, 52, 59, 833]. **assumptions** [733]. **asymmetric** [1177]. **asymmetry** [1455]. **Asymptotic** [387, 597, 761, 1200, 1298, 1569, 1600, 17, 48, 75, 384, 639, 762, 765, 813, 937, 980, 1054, 1127, 1459, 1607]. **asymptotic-preserving** [765]. **Asymptotically** [587]. **asymptotics** [534]. **asynchronous** [1222]. **atom** [34]. **atomistic** [1106]. **atomistic-to-continuum** [1106]. **attenuation** [1373]. **attracting** [1429]. **attraction** [732]. **attractivity** [1417]. **attractor** [894, 897]. **Attractors** [1030, 821, 1031]. **Augmented** [607, 698, 940, 171, 349, 478, 1065, 1080, 1102, 1362]. **auto** [114, 1335]. **auto-correction** [1335]. **auto-correlation** [114]. **Automatic** [437, 342]. **autonomous** [432, 988]. **Auxiliary** [522]. **Average** [1293]. **averages** [647, 1088]. **averaging** [483, 1306]. **Avoiding** [41, 42, 175]. **axisymmetric** [204, 1283].

**B** [339, 780, 1001, 1535]. **B-series** [339]. **B-spline** [780, 1001, 1535]. **back** [616]. **Backward** [1141, 529, 30, 141, 402, 551, 707, 1039, 1190, 1222, 1235, 1499]. **Bakhvalov** [1114]. **Bakhvalov-Shishkin** [1114]. **balance** [745, 1014]. **ball** [1329]. **Banach** [692, 1248, 1577]. **band** [478, 530]. **Banded** [848]. **Barlow** [1633]. **barotropic** [726]. **barrier** [973]. **barycentric** [107, 382, 892]. **Barzilai** [939, 508, 507, 1369]. **Basc** [704]. **based** [6, 135, 241, 378, 393, 402, 423, 434, 483, 553, 613, 633, 687, 764, 806, 852, 1004, 1065, 1072, 1186, 1187, 1191, 1220, 1224, 1225, 1273, 1317, 1442, 1467, 1507, 1521, 1525, 1550, 1579, 1633]. **bases** [44, 1072, 1516]. **basis** [124, 180, 321, 359, 427, 486, 702, 703, 722, 727, 966, 1085, 1159, 1333, 1389, 1614, 1642].

**bathymetry** [265]. **BDDC** [358]. **BDF** [954]. **BDF-like** [954]. **Beam** [1525]. **beams** [1433]. **Bean** [630]. **bed** [439]. **behaviour** [387, 500, 597, 612, 713, 1127, 1298, 1623]. **Bellman** [975, 1229]. **Bellman-type** [1229]. **Beltrami** [330]. **BEM** [6, 139, 221, 297, 613, 663, 682]. **bending** [1278]. **benefit** [929]. **Bernstein** [1320, 1322]. **Bessel** [1618, 1617]. **Best** [1329, 1332, 1598, 283, 364, 1125, 1184, 1185, 1306]. **between** [48, 187, 315, 703, 1516]. **beyond** [565]. **Bézier** [480]. **BFGS** [1639]. **bi** [810]. **bi-variate** [810]. **bicubic** [134]. **bidagonal** [872, 1193]. **bidimensional** [1397]. **BIE** [664, 665]. **bifurcation** [39, 545, 644, 1242, 1415]. **Bifurcations** [1481, 1482, 403, 812]. **biharmonic** [277, 290, 725, 755, 764, 838, 1159, 1624]. **bilateral** [144]. **bilinear** [706]. **binary** [1020]. **Birkhoff** [13]. **bisection** [740]. **bivariate** [1279, 1474]. **Black** [382, 1001, 1574, 945]. **Block** [199, 1343, 126, 247, 481, 498, 1377, 794, 804, 872, 1135, 1145, 1196, 1627]. **Block-diagonal** [1343, 481]. **block-separable** [804]. **block-tridiagonal** [498]. **blocks** [27, 1193]. **blow** [694]. **blow-up** [694]. **bmo** [78]. **bodies** [262, 663]. **body** [499, 900, 1439]. **Bogdanov** [228, 970, 969, 1612]. **Boltzmann** [701]. **Boor** [1626]. **bordered** [1627]. **borders** [794]. **Borwein** [508, 507, 939, 1369]. **bound** [152, 154, 643, 754, 805, 1181, 1389, 1451]. **bound-constrained** [805]. **boundaries** [416]. **Boundary** [915, 946, 1073, 4, 8, 16, 41, 42, 57, 80, 83, 89, 106, 130, 159, 163, 168, 197, 203, 214, 220, 225, 230, 231, 242, 243, 260, 272, 337, 349, 371, 368, 377, 386, 399, 404, 405, 416, 423, 431, 454, 457, 467, 531, 532, 571, 579, 617, 621, 634, 649, 660, 673, 685, 738, 747, 773, 818, 845, 878, 879, 881, 884, 885, 900, 906, 911, 913, 977, 992, 1045, 1047, 1108, 1157, 1163, 1170, 1201, 1214, 1240, 1256, 1262,

1282, 1309, 1354, 1373, 1411, 1460, 1465, 1486, 1494, 1498, 1497, 1501, 1502, 1529]. **boundary** [1565, 1601, 945]. **boundary-concentrated** [617]. **boundary-finite** [915]. **boundary-locus** [130]. **boundary-value** [272, 423, 818, 1240]. **Bounded** [1458, 441, 1364, 1381, 1646]. **Bounded-norm** [1458]. **boundedness** [878, 879]. **Bounds** [974, 20, 22, 24, 21, 25, 88, 142, 145, 215, 420, 531, 537, 757, 988, 987, 1086, 1291, 1289, 1290, 1320, 1321, 1378, 1382, 1393, 1443, 1499, 1518, 1566, 1573, 1580, 1582]. **Boussinesq** [671, 1304]. **box** [661, 698, 733, 1353]. **Branch** [39, 344]. **branched** [498]. **breaking** [969, 1242, 1612]. **bridge** [1576]. **Brinkman** [47, 717, 991]. **Broken** [173, 318]. **Brownian** [361, 1576]. **Broyden** [1648]. **bubble** [706, 787]. **bulk** [619, 636]. **bulk-surface** [619, 636]. **Burgers'** [1409, 1101, 1388]. **Burgers-like** [1101]. **Burniston** [46]. **Burniston-Siewert** [46].

**Cahn** [155, 95, 238, 554, 689, 802, 803, 1075, 1262]. **Cahn/Cahn** [155]. **calculation** [233, 251, 476, 811, 1136]. **calculus** [1391]. **Call** [61]. **Camassa** [1581]. **Canham** [801]. **canonical** [59]. **capillarity** [360]. **capillary** [193]. **capturing** [1388]. **Caputo** [1494]. **Carathéodory** [626, 627, 1340]. **cardinality** [375]. **Carlo** [781, 1067, 1161]. **cartoon** [631]. **case** [34, 252, 565, 660, 665, 664, 911, 1351, 1353]. **Cauchy** [235, 466, 490, 1079, 1323, 1338]. **Cauchy-type** [490]. **cavity** [695]. **cell** [380, 653, 735, 760]. **cell-centred** [380, 653]. **centered** [645]. **central** [314, 1096, 1226]. **central-difference** [1226]. **central-upwind** [314]. **centre** [994]. **Centred** [1526, 380, 653]. **certain** [485, 559, 639, 779, 909, 1028, 1321, 1609]. **chain** [1295]. **chains** [1078]. **Change** [593, 964, 548, 599, 1375, 1628, 1647]. **changes** [613]. **changing** [710]. **channel** [1008]. **chaos** [1522]. **Characteristic** [262, 80, 286]. **Cheap** [1059]. **chebfuns** [1305]. **Chebyshev** [40, 218, 219, 283, 658, 800, 1008, 1092, 1101, 1184, 1231, 1255, 1320, 1459, 1480, 1479, 1550, 1568, 1587, 1589, 1598]. **chemotaxis** [1395]. **choice** [492, 985, 1369]. **Cholesky** [397, 1487, 1647]. **Chordal** [700]. **Christoffel** [533]. **CIP** [1607]. **circle** [324, 482, 786]. **circular** [695, 1183]. **claims** [1658, 550]. **class** [4, 126, 310, 311, 353, 367, 405, 464, 646, 679, 691, 753, 834, 846, 880, 905, 1000, 1016, 1017, 1103, 1175, 1267, 1366, 1386, 1404, 1430, 1460, 1523, 1540, 1543]. **classical** [98, 108]. **classification** [1432]. **Clement** [82]. **Clement-type** [82]. **Clenshaw** [568, 1618, 12, 1617]. **close** [486]. **close-to-touching** [486]. **Closed** [901, 166, 780, 1407]. **Closed-form** [901]. **closest** [650]. **Closing** [315]. **closure** [75]. **clustering** [1047]. **codes** [393, 855, 1437]. **coefficient** [826, 986, 1013, 1266, 1332, 1402, 1592]. **coefficients** [78, 251, 410, 430, 616, 702, 775, 927, 943, 987, 996, 995, 1231, 1269, 1324, 1522, 1568, 1640, 1651, 522]. **collection** [1439]. **Collective** [1199]. **Collocation** [37, 1022, 1513, 17, 102, 206, 230, 232, 237, 297, 306, 305, 309, 311, 490, 559, 580, 729, 761, 788, 798, 822, 846, 881, 993, 1001, 1008, 1061, 1089, 1092, 1101, 1146, 1166, 1221, 1314, 1471, 1480, 1479, 1509, 1561, 1600, 1601, 863]. **collocation-type** [1061]. **combination** [800, 1374]. **combinations** [792]. **combined** [260, 1560]. **committed** [1551]. **commutator** [236]. **commutator-free** [236]. **Compact** [318, 739, 549, 723, 1477]. **compactly** [427]. **companion** [529]. **Comparison** [185, 370, 46, 145, 366, 724]. **Comparisons** [703, 1439]. **compatible** [246, 587, 695]. **complement** [772]. **complementarity** [125, 1580, 1579].

**complementary** [1514]. **complete** [256, 1553]. **completely** [500, 1623].  
**completion** [36, 409]. **Complex** [99, 950, 84, 199, 533, 618, 764, 834, 967, 1177, 1184, 1290, 1414, 1568, 1587].  
**Complexity** [753, 806, 373, 505].  
**component** [152, 153, 154, 240, 1576].  
**Componentwise** [1580, 429, 1390].  
**Composite** [1331, 275, 480, 1603].  
**compound** [558, 1034]. **compressible** [243, 726, 777, 1015]. **compressible-gas** [777]. **Computable** [22, 21, 25, 88, 881, 1086, 1573, 20, 1558].  
**Computation** [994, 1209, 1210, 1243, 1340, 1485, 5, 27, 227, 270, 283, 399, 581, 637, 644, 767, 939, 1064, 1065, 1088, 1146, 1218, 1253, 1315, 1532, 1535, 1568]. **Computational** [420, 545]. **Computations** [873, 505, 1161, 1171]. **computed** [537, 612].  
**computer** [854, 853]. **computerized** [1339].  
**computers** [1289]. **Computing** [131, 286, 285, 598, 891, 978, 1505, 1506, 1644, 1652, 60, 404, 455, 486, 667, 722, 868, 1211, 1297, 1449, 1622]. **concentrated** [617].  
**concentration** [153].  
**concentration-dependent** [153].  
**concerning** [1308]. **condition** [51, 52, 163, 194, 197, 429, 693, 747, 825, 1099, 1606, 1647, 945]. **conditional** [598].  
**conditioned** [114, 771, 1501]. **conditioning** [94, 696, 1387]. **Conditions** [1348, 80, 184, 214, 243, 260, 323, 349, 386, 464, 571, 579, 657, 673, 679, 685, 839, 878, 879, 1045, 1069, 1163, 1262, 1309, 1460, 1474, 1486, 1542, 1596]. **conducting** [262].  
**conduction** [20]. **conductivity** [606].  
**configuration** [1033]. **conformal** [390, 625, 724, 1035, 1092]. **Conforming** [355, 842, 1008, 81, 298, 379, 620, 717, 748, 843, 1083, 1111, 1272, 1276]. **conjecture** [1308]. **Conjugate** [1177, 123, 850, 967, 1361, 1455, 1560, 1645].  
**conjugate-gradient** [967]. **connected** [1035, 1221]. **connecting** [227, 1243].  
**Conservation** [460, 389, 445, 475, 751, 851, 878, 879, 914, 1037, 1216, 1427, 1443, 1473, 1526, 1641].  
**Conservative** [347, 1395, 1406, 1355, 1356, 1365].  
**conserving** [422]. **consistency** [1430, 1527].  
**consistent** [564]. **consolidation** [1410].  
**Constant** [24, 565, 971, 1524, 1629].  
**constants** [846, 1512, 1557]. **constrained** [77, 176, 195, 283, 414, 496, 643, 698, 704, 805, 1027, 1247, 1416, 1428, 1489].  
**Constraining** [1038]. **constraints** [373, 519, 1190, 1332]. **constricted** [1008].  
**constructing** [1244]. **Construction** [937, 648, 866, 988, 1599, 1625].  
**Constructive** [970]. **contact** [19, 144, 187, 193, 434, 531]. **context** [1168, 1441]. **contingent** [1658, 550].  
**continuation** [711, 762, 930, 1334].  
**continued** [498]. **Continuous** [669, 1394, 1467, 23, 327, 358, 713, 988, 1076, 1125, 1365, 1524, 1584]. **continuum** [1106, 1295]. **contour** [1593]. **contours** [254]. **contraction** [1238]. **contrast** [328].  
**control** [76, 83, 90, 126, 294, 295, 342, 369, 377, 414, 603, 619, 762, 841, 851, 1068, 1295, 1353, 1359, 1421]. **control-state** [414].  
**controlled** [854, 853]. **Convection** [263, 264, 109, 132, 147, 200, 299, 354, 372, 379, 425, 421, 413, 448, 483, 523, 567, 605, 614, 674, 735, 754, 837, 1013, 1018, 1032, 1100, 1114, 1116, 1124, 1136, 1143, 1142, 1157, 1156, 1171, 1215, 1250, 1252, 1284, 1408, 1447, 1570, 1572, 1596, 1615, 1653, 501, 524, 1498].  
**convection-diffusion** [109, 147, 299, 354, 379, 421, 605, 674, 735, 754, 837, 1013, 1018, 1114, 1116, 1143, 1142, 1157, 1156, 1171, 1215, 1250, 1408, 1447, 1570, 1596, 1615, 524].  
**convection-diffusion-reaction** [483].  
**Convection-diffusion-type** [1498].  
**convection-dominated** [132, 1100].  
**converge** [1333]. **Convergence** [8, 35, 121, 129, 151, 236, 297, 319, 360, 367,

388, 475, 506, 505, 569, 582, 602, 667, 691, 721, 727, 731, 741, 750, 865, 904, 926, 975, 996, 995, 1025, 1058, 1066, 1074, 1142, 1262, 1272, 1399, 1432, 1522, 1578, 1577, 1592, 1602, 1603, 1611, 1613, 1610, 1615, 1626, 1646, 1651, 1549, 33, 43, 51, 52, 94, 119, 125, 132, 179, 190, 239, 268, 269, 295, 308, 395, 394, 400, 411, 490, 495, 508, 532, 554, 563, 585, 625, 628, 666, 679, 692, 693, 769, 770, 861, 870, 878, 879, 894, 921, 930, 922, 935, 950, 966, 1050, 1060].

**convergence** [1071, 1105, 1130, 1157, 1155, 1154, 1162, 1191, 1214, 1213, 1241, 1259, 1271, 539, 1328, 1336, 1348, 1346, 1350, 1352, 1360, 1361, 1375, 1415, 1420, 1425, 1431, 1451, 1468, 1518, 1520, 1523, 1570, 1575, 1637, 1638, 1640, 1645, 945].

**Convergent** [1017, 1257, 1456, 135, 136, 176, 423, 448, 684, 742, 752, 903, 906, 984, 1015, 1158, 1266, 1502].

**Conversion** [1516].

**convex** [234, 367, 373, 541, 782, 867, 1027, 1294, 1471].

**Convexity** [1003, 548].

**Convexity-preserving** [1003].

**Convolution** [399, 844, 396, 845, 1128, 1137, 1138, 1368].

**Cook** [1075].

**coordinate** [247].

**coordinates** [1239, 1485].

**corank** [39].

**corank-** [39].

**corner** [876, 1143].

**corotational** [170].

**Corrected** [1175, 990].

**correction** [147, 149, 662, 841, 1335].

**corrections** [275, 1316].

**corrector** [616, 1544, 1548, 1546, 1547].

**Correlation** [36, 114, 255, 891, 1362, 1644].

**corresponding** [699, 1021].

**Corrigendum** [156, 248, 407, 576, 1263].

**Cosine** [1628, 356, 462, 463].

**Cotes** [1097, 1609].

**counterexample** [828].

**counterpart** [134].

**coupled** [89, 212, 213, 276, 419, 619, 636, 655, 690, 915, 1025, 1117, 1129, 1158, 1284, 1370, 1408, 1556].

**Coupling** [368, 6, 48, 197, 297, 337, 371, 381, 560, 663, 748, 749, 1026, 1106, 1179, 1212, 1392].

**couplings** [454].

**covariance** [493].

**covariant** [536].

**CQ** [139].

**CQ-BEM** [139].

**crack** [398].

**cracks** [189].

**Craig** [1615].

**Crank** [504, 792, 983, 1149, 1375].

**Crank-Gupta** [504].

**criss** [325].

**criss-cross** [325].

**criteria** [1222].

**criterion** [183].

**critical** [549, 635].

**critical-state** [635].

**criticality** [1161].

**cross** [224, 262, 325, 701].

**cross-diffusion** [224].

**cross-section** [262].

**Crouzeix** [1051, 1113].

**cubature** [198, 699, 1160].

**Cubic** [1180, 32, 134, 373, 480, 513, 700, 1022, 1169, 1316, 1357, 1465, 1468, 1475].

**curl** [113, 444, 910, 522].

**curl-curl** [444].

**current** [6, 204, 203, 262, 630, 1376, 1384, 1466].

**course** [1576].

**Curtis** [1617, 1618, 12, 568].

**curvature** [168, 494, 633, 656, 689, 715, 1058, 1281].

**Curve** [469, 480, 531, 633].

**curved** [159, 163, 882, 1392].

**curves** [97, 166, 172, 174, 175, 257, 675, 677, 1407].

**cusps** [1478].

**cut** [330].

**Cycle** [1613].

**cyclic** [507].

**cylinder** [767].

**cylindrical** [1069].

**D** [55, 188, 266, 372, 388, 430, 448, 635, 942, 1040, 1082, 1155, 1174].

**dam** [1514].

**damped** [1077].

**Darboux** [533].

**Darboux-type** [533].

**Darcy** [112, 212, 213, 289, 419, 560, 860, 1179, 1212].

**Data** [489, 609, 16, 159, 203, 283, 372, 482, 516, 542, 541, 547, 548, 561, 675, 695, 809, 913, 920, 982, 1147, 1302, 1504, 1589, 1614, 1615, 1620].

**data-reduction** [1147].

**DDFV** [55, 273].

**decaying** [785].

**decomposable** [1325].

**decomposing** [631].

**decomposition** [93, 217, 226, 262, 380, 687, 744, 764, 773, 810, 861, 1144, 1484, 1529, 1630].

**decompositions** [225, 453, 452, 572, 722, 919, 1005, 1488, 1642].

**decoupled** [136].

**Decoupling** [1193].

**Dedication** [963].

**deep** [265].

**defect** [275, 662, 149].

**deferred** [662, 841].

**deficient** [194].

**definite** [857, 1349, 1438].

**definiteness** [183].

**defocusing** [3].

**Degasperis** [455]. **Degenerate** [975, 9, 367, 711, 758, 796, 1013, 1466, 1562, 1572].  
**degree** [358, 421, 1003]. **Delay** [827, 129, 131, 192, 286, 316, 829, 828, 917, 1123, 1542, 1611, 1643, 944, 1548].  
**delay-integro-differential** [1643]. **delays** [309, 311, 917, 924, 1524]. **delta** [122].  
**Delves** [46]. **Delves-Lyness** [46].  
**denominator** [541]. **density** [378, 630, 720].  
**depend** [1518]. **dependent** [6, 27, 141, 146, 153, 210, 214, 304, 448, 523, 609, 613, 827, 869, 888, 899, 916, 1012, 1033, 1041, 1149, 1217, 1489, 1572]. **derivation** [1042]. **derivative** [426, 468, 543, 703, 790, 1103, 1324, 1381, 1494, 1649].  
**derivative-free** [426, 468, 1103].  
**derivatives** [254, 601, 1230, 1237, 1345, 1505, 1506, 1535, 1573, 1629]. **derived** [1204]. **Descent** [33, 247, 494, 495, 503, 520, 1645].  
**describing** [216]. **Design** [1050, 758, 1508].  
**determinants** [953, 1540]. **Determination** [800, 114, 543, 791, 898]. **deterministic** [457, 753, 1127]. **DeTurck** [633].  
**Developments** [1345, 783, 1288]. **Devising** [452, 454, 453]. **DG** [879, 615, 843, 1056, 1057, 1120, 1653, 522].  
**DGFEM** [1426, 1597]. **diagonal** [481, 1343].  
**diagonally** [350, 1440]. **Difference** [9, 4, 32, 30, 84, 143, 242, 244, 296, 381, 404, 405, 448, 491, 551, 571, 621, 659, 679, 903, 904, 955, 973, 996, 995, 1013, 1036, 1037, 1069, 1116, 1141, 1157, 1155, 1154, 1192, 1204, 1207, 1216, 1226, 1239, 1258, 1374, 1427, 1443, 1493, 1494, 1496, 1502, 1562, 1564, 1592, 1623, 1635]. **difference-type** [1623]. **differences** [489, 739]. **different** [1516]. **differentiability** [657].  
**differentiable** [791, 1324]. **differential** [1, 79, 116, 131, 149, 192, 252, 286, 315, 316, 334, 350, 356, 361, 376, 400, 402, 420, 611, 622, 623, 628, 636, 645, 705, 708, 716, 729, 768, 812, 820, 821, 827, 856, 886, 910, 918, 917, 933, 949, 968, 976, 988, 1023, 1031, 1030, 1053, 1076, 1107, 1105, 1115, 1123, 1141, 1151, 1164, 1165, 1166, 1198, 1223, 1235, 1246, 1260, 1269, 1271, 1301, 1311, 1312, 1314, 1340, 1371, 1372, 1379, 1394, 1429, 1445, 1485, 1509, 1524, 1536, 1542, 1598, 1599, 1643, 1657, 944, 1552].  
**differential-algebraic** [350, 1301].  
**differential-functional** [1657].  
**differentiation** [141, 351, 707, 848, 960, 1024, 1605, 1625].  
**diffuse** [637, 1237]. **diffusion** [14, 84, 109, 132, 147, 178, 224, 251, 276, 285, 299, 354, 372, 379, 385, 388, 387, 421, 413, 449, 448, 483, 523, 552, 567, 587, 600, 605, 614, 618, 620, 637, 640, 647, 653, 654, 674, 714, 735, 754, 812, 837, 934, 979, 986, 981, 1013, 1018, 1032, 1040, 1041, 1056, 1063, 1100, 1114, 1116, 1117, 1119, 1124, 1127, 1143, 1142, 1157, 1154, 1156, 1158, 1171, 1215, 1213, 1227, 1250, 1252, 1258, 1259, 1261, 1287, 1328, 1342, 1351, 1405, 1408, 1423, 1447, 1495, 1498, 1497, 1527, 1570, 1572, 1596, 1611, 1615, 1653, 550, 524].  
**diffusion-uniform** [1056]. **diffusions** [11].  
**diffusive** [1127]. **diffusivity** [647]. **digital** [553]. **digits** [1289, 1538]. **dilute** [170].  
**Dimension** [862, 147, 422, 512, 653, 739, 876, 1215, 1217, 1310, 1493].  
**dimension-splitting** [876]. **dimensional** [29, 98, 180, 261, 273, 278, 289, 296, 305, 385, 441, 443, 461, 648, 660, 664, 713, 735, 831, 870, 885, 979, 1006, 1024, 1084, 1096, 1104, 1120, 1150, 1154, 1156, 1197, 1269, 1303, 1351, 1370, 1432, 1443, 1456, 1615, 1616, 853].  
**dimensionality** [1576]. **dimensionally** [22].  
**dimensions** [9, 87, 115, 142, 182, 649, 681, 842, 1100, 1119, 1132, 1224, 1225, 1344, 1529].  
**diminishing** [849, 851]. **diodes** [26]. **Dirac** [372]. **Direct** [479, 644, 497, 811, 866, 1055].  
**direction** [232, 409, 449, 448]. **directions** [791]. **Dirichlet** [137, 665, 672, 1178, 1233, 1309].  
**Dirichlet-to-Neumann** [137]. **disc** [864].  
**discontinuities** [335, 336]. **Discontinuous** [222, 307, 467, 685, 755, 911, 1567, 24, 79, 95,



120, 171, 289, 298, 330, 337, 354, 358, 369, 422, 411, 444, 445, 454, 455, 483, 555, 567, 570, 614, 647, 689, 759, 758, 756, 754, 819, 910, 912, 913, 927, 1009, 1013, 1049, 1074, 1151, 1174, 1217, 1216, 1259, 1261, 1469, 1579, 522]. **discovered** [840]. **discrepancy** [985]. **Discrete** [40, 75, 93, 196, 670, 680, 989, 1090, 1586, 2, 9, 55, 104, 102, 139, 141, 223, 246, 267, 283, 314, 351, 422, 431, 461, 532, 561, 606, 662, 669, 695, 852, 869, 904, 979, 1011, 1029, 1058, 1096, 1163, 1201, 1350, 1431, 1447, 1467, 1531, 1641, 524]. **discrete-time** [662]. **Discretising** [43]. **Discretization** [18, 276, 654, 801, 1196, 1235, 1250, 1441, 14, 32, 47, 55, 75, 135, 137, 179, 212, 211, 207, 213, 216, 287, 289, 291, 299, 500, 563, 586, 587, 602, 611, 632, 745, 812, 818, 821, 871, 942, 948, 954, 998, 1031, 1030, 1050, 1134, 1140, 1141, 1155, 1198, 1202, 1205, 1258, 1263, 1264, 1294, 1328, 1391, 1442, 1466, 1575, 501]. **discretizations** [3, 54, 91, 261, 293, 372, 709, 769, 802, 894, 910, 934, 1032, 1044, 1194, 1556, 522, 945, 1552]. **discretized** [35, 320, 343, 732]. **Discretizing** [403, 435]. **discs** [486]. **disk** [198]. **dispersive** [244, 1074]. **Displacement** [908]. **dissipation** [314]. **dissipative** [861, 933]. **Dissipativity** [924]. **distance** [1390, 1591]. **distributed** [126]. **distribution** [699, 742, 1538]. **div** [709, 717, 1342]. **divergence** [55, 112, 678, 842, 1304, 1383, 1642]. **divergence-free** [678, 842, 1304, 1383, 1642]. **diverse** [1439]. **Divided** [1216, 489]. **do** [1333]. **Domain** [1484, 1529, 10, 93, 137, 217, 226, 324, 380, 561, 663, 687, 734, 744, 773, 845, 861, 919, 1074, 1142, 1144, 1154, 1240, 1630, 1646]. **domains** [22, 25, 81, 82, 83, 112, 113, 118, 189, 300, 416, 618, 671, 732, 863, 971, 978, 1035, 1144, 1331, 1221, 1315, 1364, 1383]. **dominated** [132, 1100, 1284]. **Donaldson** [1380]. **Doppler** [1168]. **double** [905, 1278]. **double-well** [1278]. **doubling** [644, 834]. **doubly** [1221]. **Douglas** [1350]. **downdating** [1401]. **DPG** [719]. **drift** [251, 388, 387, 745]. **drift-diffusion** [388, 387]. **drift-flux** [745]. **driven** [361, 375, 1037]. **drops** [873]. **Dual** [1528, 238, 1072, 1277, 1362]. **Dual-primal** [1528]. **duality** [55]. **due** [876]. **dumbbell** [170]. **Dynamic** [19, 288, 360, 456, 1045, 1076, 1262, 1410]. **dynamical** [227, 403, 924]. **Dynamics** [3, 320, 661, 666, 777, 949, 950, 1033, 1088, 1537]. **E-based** [6]. **Eckhoff** [1335]. **eddy** [6, 204, 203, 1376, 1384, 1466]. **edge** [86, 1124, 1126, 1426, 1528]. **edges** [81]. **Editorial** [68, 592, 1515, 1249]. **Editorship** [593, 964]. **educational** [442]. **effect** [655, 1636]. **effective** [599, 1297]. **effects** [992, 1455]. **Efficiency** [776]. **Efficient** [251, 641, 1004, 1064, 1084, 1435, 1436, 518, 760, 1469, 1491]. **eigenelement** [1060]. **eigenpairs** [233]. **eigenproblems** [1318]. **eigensystems** [1505]. **Eigenvalue** [10, 487, 53, 189, 226, 241, 302, 353, 412, 436, 440, 608, 712, 731, 737, 752, 980, 1048, 1084, 1206, 1211, 1209, 1210, 1334, 1503, 1582, 1608, 1621]. **eigenvalues** [60, 267, 270, 285, 404, 505, 537, 725, 978, 1048, 1146, 1211, 1275, 1372, 1506]. **eigenvectors** [1506]. **Elastic** [1351, 144, 172, 174, 364, 398, 499, 687, 1163]. **elasticity** [243, 366, 452, 787, 1072, 1597, 1616]. **elastodynamics** [79, 766]. **elastoplastic** [205]. **electric** [221, 630]. **electrical** [276, 984]. **electrically** [262]. **Electromagnetic** [977]. **electron** [1033]. **electrostatic** [486]. **Element** [975, 20, 24, 21, 25, 38, 53, 54, 58, 80, 81, 86, 85, 88, 89, 92, 109, 110, 111, 112, 113, 121, 135, 142, 145, 159, 160, 161, 162, 163, 149, 148, 164, 158, 152, 153, 154, 155, 151, 169, 156, 157, 178, 186, 188, 189, 197, 202, 204,

209, 208, 212, 211, 220, 222, 229, 266, 275, 276, 288, 298, 329, 335, 336, 337, 340, 355, 361, 371, 366, 370, 369, 399, 410, 424, 415, 412, 428, 433, 438, 454, 467, 491, 505, 531, 530, 554, 569, 582, 584, 589, 605, 606, 614, 632, 634].

**element** [630, 635, 636, 649, 651, 672, 671, 673, 687, 690, 688, 715, 725, 734, 737, 742, 744, 748, 747, 759, 758, 757, 774, 778, 787, 835, 836, 858, 860, 869, 874, 875, 884, 885, 899, 900, 911, 912, 915, 927, 979, 980, 981, 984, 990, 1000, 1006, 1020, 1025, 1026, 1032, 1043, 1051, 1053, 1062, 1070, 1072, 1077, 1075, 1086, 1087, 1094, 1098, 1108, 1113, 1114, 1134, 1136, 1143, 1142, 1172, 1173, 1179, 1201, 1206, 1214, 1215, 1212, 1227, 1229, 1254, 1263, 1264, 1270, 1274, 1278, 1287, 1294, 1304, 1309, 1312, 1313, 539, 1328, 1342, 1343, 1370, 1371, 1379, 1384].

**element** [1392, 1394, 1395, 1397, 1400, 1408, 1424, 1432, 1433, 1457, 1483, 1498, 1497, 1519, 1521, 1528, 1557, 1575, 1583, 1616, 1624, 1632, 1649, 502].

**elements** [23, 108, 115, 201, 280, 358, 371, 368, 377, 379, 443, 511, 610, 620, 660, 706, 741, 793, 796, 842, 873, 977, 991, 1017, 1044, 1083, 1111, 1126, 1227, 1228, 1258, 1276, 1356, 1383, 1398, 1419, 1451, 1495, 1646].

**elimination** [362, 428, 794, 1291, 1488, 1627].

**Elliott** [1380]. **Elliott-Donaldson** [1380]. **ellipses** [482].

**elliptic** [2, 39, 57, 58, 78, 108, 159, 161, 162, 163, 229, 231, 256, 294, 296, 329, 348, 353, 355, 386, 423, 427, 467, 476, 503, 530, 569, 582, 584, 601, 632, 634, 645, 685, 716, 737, 756, 778, 823, 836, 898, 911, 910, 912, 913, 927, 996, 1009, 1023, 1087, 1129, 1145, 1174, 1178, 1224, 1240, 1257, 1334, 1378, 1457, 1498, 1497, 1522, 1613, 1630, 1633, 1640, 1651, 501, 522].

**elliptic-hyperbolic** [582]. **emanating** [228]. **embedded** [335, 575, 576].

**embedding** [1323]. **embeddings** [318].

**empirical** [743]. **enclosures** [34]. **End** [184]. **endpoint** [1338]. **endpoints** [720].

**Energy** [849, 990, 564, 751, 801, 1278, 1521].

**energy-based** [1521]. **Energy-corrected** [990]. **Energy-diminishing** [849].

**enhanced** [1536]. **enhancement** [834, 1216]. **Enhancing** [1608]. **Enright** [886]. **ensuring** [648]. **enthalpy** [599, 629, 1098, 1491, 1564]. **enthalpy-type** [1491]. **Entries** [61, 953, 1382]. **entropy** [766, 1364, 1641]. **Envelope** [768, 1].

**enveloping** [1171]. **environment** [616].

**epidemic** [1127]. **equal** [742]. **equality** [1190, 1247]. **equally** [1316]. **equation** [1, 3, 5, 16, 32, 34, 88, 95, 101, 103, 106, 105, 108, 135, 136, 145, 147, 186, 213, 221, 261, 277, 287, 308, 320, 538, 343, 351, 361, 372, 377, 379, 384, 398, 399, 410, 416, 411, 431, 435, 446, 455, 461, 488, 500, 504, 554, 559, 579, 600, 602, 604, 605, 616, 636, 642, 652, 656, 661, 665, 664, 680, 689, 701, 716, 729, 744, 750, 751, 757, 812, 823, 826, 832, 833, 845, 857, 863, 864, 893, 903, 904, 925, 923, 946, 986, 982, 1001, 1004, 1050, 1066, 1068, 1077, 1076, 1075, 1082, 1092].

**equation** [1104, 1111, 1122, 1131, 1146, 1159, 1173, 1186, 1202, 1203, 1239, 1250, 1254, 1260, 1258, 1259, 1262, 1273, 1325, 1328, 1388, 1406, 1409, 1424, 1422, 1423, 1453, 1454, 1460, 1531, 1574, 1569, 1581, 1592, 1596, 1607, 1624, 1623, 1628, 1654, 1655].

**Equations** [18, 975, 7, 9, 29, 30, 28, 45, 47, 54, 78, 79, 80, 87, 104, 102, 109, 111, 112, 116, 121, 123, 122, 129, 131, 133, 141, 142, 159, 160, 161, 162, 163, 149, 165, 191, 192, 195, 200, 202, 206, 209, 212, 214, 213, 216, 218, 222, 236, 237, 244, 246, 250, 251, 266, 286, 299, 306, 305, 309, 307, 311, 314, 315, 316, 334, 341, 347, 359, 369, 388, 396, 395, 394, 400, 402, 421, 422, 413, 428, 432, 443, 478, 490, 491, 503, 519, 521, 526, 530, 535, 549, 563, 586, 589, 606, 611].

**equations** [618, 619, 620, 622, 623, 645, 647, 668, 671, 673, 674, 683, 687, 705, 708, 717, 721, 726, 728, 768, 784, 798, 799, 797, 802, 819, 821,

822, 827, 829, 828, 834, 843, 856, 862, 870, 884, 886, 898, 897, 895, 910, 918, 933, 948, 949, 965, 968, 973, 976, 979, 988, 987, 989, 996, 995, 998, 1012, 1010, 1011, 1016, 1013, 1018, 1023, 1031, 1030, 1032, 1033, 1036, 1046, 1047, 1053, 1061, 1069, 1074, 1078, 1079, 1083, 1096, 1101, 1107, 1103, 1100, 1105, 1112, 1123, 1121, 1120, 1137, 1138, 1139, 1140, 1141, 1145, 1150, 1151, 1149, 1153, 1162, 1163, 1164, 1165].

**equations**  
[1166, 1187, 1188, 1197, 1198, 1200, 1207, 1229, 1233, 1234, 1236, 1235, 1246, 1248, 1257, 1261, 1269, 1271, 1287, 1311, 1312, 1313, 1314, 1323, 1340, 1348, 1363, 1368, 1371, 1373, 1379, 1394, 1404, 1405, 1407, 1411, 1412, 1429, 1431, 1437, 1442, 1445, 1452, 1456, 1464, 1461, 1462, 1463, 1470, 1471, 1477, 1480, 1479, 1484, 1509, 1524, 1527, 1530, 1542, 1570, 1577, 1572, 1583, 1587, 1598, 1599, 1611, 1613, 1615, 1629, 1640, 1643, 1653, 1657, 944, 1513, 1552, 1549, 1548, 831].

**equidistributing** [1626]. **equidistribution** [385]. **equilateral** [936]. **equilibrated** [484, 1273]. **equilibria** [1429]. **Equilibrium** [1417, 35, 164, 604, 1088]. **equispaced** [107, 590, 702]. **Equivalence** [1307, 1619, 1620]. **Errata** [462, 591, 1165].

**Erratum**  
[51, 622, 879, 1109, 1210, 1482, 1618, 264].

**Error**  
[16, 38, 58, 59, 83, 120, 142, 252, 295, 349, 357, 410, 446, 629, 652, 726, 981, 1034, 1068, 1100, 1116, 1149, 1232, 1279, 1289, 1290, 1320, 1359, 1368, 1393, 1421, 1424, 1443, 1493, 1496, 1566, 20, 22, 24, 21, 25, 76, 77, 82, 88, 89, 109, 145, 152, 154, 171, 188, 208, 214, 215, 216, 241, 287, 290, 288, 327, 328, 345, 348, 369, 372, 378, 424, 420, 413, 434, 483, 484, 512, 531, 537, 549, 567, 568, 570, 573, 577, 617, 619, 634, 690, 691, 738, 742, 759, 756, 757, 754, 774, 801, 819, 831].

**error**  
[837, 881, 887, 910, 912, 933, 988, 987, 1010, 1011, 1018, 1020, 1029, 1039, 1040, 1041, 1049, 1053, 1054, 1055, 1056, 1057, 1059, 1062, 1063, 1086, 1092, 1113, 1126, 1151, 1181, 1191, 1200, 1203, 1273, 1288, 1291, 1295, 1302, 1310, 1317, 1358, 1371, 1378, 1405, 1441, 1446, 1483, 1519, 1558, 1573, 1580, 1614, 1607, 1635, 1653, 524, 1551, 1545, 179].

**Errors**  
[1555, 1176, 1222, 1321, 1563, 1633, 1636].

**essential** [1178]. **estimate**  
[16, 216, 335, 424, 567, 585, 634, 1054, 1099, 1113, 1558, 1635, 1653]. **Estimates**  
[194, 58, 59, 82, 83, 89, 109, 141, 160, 162, 179, 188, 252, 260, 317, 327, 348, 372, 410, 413, 446, 512, 568, 652, 690, 726, 727, 759, 774, 801, 819, 831, 837, 881, 1012, 1010, 1011, 1020, 1029, 1034, 1040, 1041, 1053, 1055, 1056, 1126, 1151, 1149, 1212, 1216, 1232, 1302, 1310, 1368, 1399, 1405, 1410, 1424, 1446, 1483, 1493, 1496, 1519, 1531, 1572, 1614, 524].

**Estimating** [720]. **estimation**  
[38, 57, 82, 241, 284, 328, 345, 434, 573, 577, 986, 1059, 1062, 1063, 1107, 1191].

**estimator** [290, 483, 484, 1273, 1317].

**estimators** [375, 1018]. **Euler** [765, 843, 870, 1071, 1096, 1197, 1266, 1269, 1575].

**Euler-type** [1197]. **Eulerian** [1570, 1572].

**Evaluation**  
[498, 103, 180, 182, 256, 373, 485, 540, 760, 905, 993, 1266, 1285, 1290, 1386]. **evolution**  
[45, 54, 140, 165, 236, 538, 866, 895, 1202, 1203]. **evolutionary** [549, 603]. **evolving**  
[610, 611, 637, 1043, 1044, 1141]. **Exact**  
[245, 909, 1386, 439, 1027, 1411, 1431].

**exactly** [1304]. **exactness** [300]. **example**  
[1637]. **exchange** [446]. **Existence**  
[682, 471, 988, 1352]. **expansion**  
[702, 1054, 1116, 1238, 1569].

**expansion-contraction** [1238].

**expansions** [13, 937, 961, 962, 1200, 1403].

**Expected** [696]. **experiments** [187].

**Explicit** [1105, 1625, 1642, 30, 28, 345, 812, 813, 887, 1153, 1182, 1301, 1481, 1482].

**exploration** [1413]. **Exponential** [896, 1425, 42, 236, 279, 339, 383, 465, 646, 668, 931, 952, 1021, 1124, 1134, 1162, 1182, 1189,

1214, 1213, 1246, 1445, 1446, 1453, 1579].  
**exponential-fitting** [465, 1453].  
**Exponentially** [752, 423, 785, 1454, 1501].  
**exponentially-fitted** [1454]. **exponentials**  
[1589]. **expressed** [44]. **extended**  
[707, 1543]. **extensible** [1433]. **extension**  
[626, 1525, 1622, 525]. **extensions**  
[698, 1232]. **exterior**  
[142, 300, 337, 486, 649, 665, 663]. **external**  
[1372]. **extrapolation**  
[595, 662, 907, 972, 1060, 1111, 1301, 1368,  
1435, 1436, 1449, 1566].

**Faber** [1315]. **fabrication** [854, 853]. **face**  
[620]. **factor** [1152]. **factorization**  
[247, 391, 397, 458, 591, 596, 594, 1377, 1023,  
1401, 527]. **factorization-related** [1023].  
**factorizations** [782]. **factors**  
[901, 1373, 1487, 1647]. **Falk** [1635]. **falling**  
[29]. **Families** [574, 1598]. **family**  
[23, 991, 1065, 1286, 1561, 1572, 1648, 1649].  
**far** [978]. **Fast** [180, 182, 256, 650, 767, 889,  
1268, 1532, 1568, 1605, 116, 185, 764, 852,  
942, 993, 1069, 1282, 1333, 1367, 1459, 1507].  
**features** [35, 928]. **Feedback** [818]. **Fejér**  
[626, 627]. **Fem**  
[1156, 6, 57, 136, 297, 348, 367, 364, 365, 617,  
663, 730, 731, 1213, 1425, 1607]. **FENE**  
[156, 157]. **FENE-P** [156, 157]. **Fermi** [34].  
**ferromagnetic** [1466]. **FETI** [1528]. **few**  
[1005]. **FFT** [852, 1327]. **FFT-based** [852].  
**FFTRR** [764]. **FFTRR-based** [764].  
**Fickian** [178]. **fictitious** [663, 1240].  
**fidelity** [631]. **Fiedler** [529]. **field** [167, 221,  
260, 424, 446, 638, 630, 1020, 1029, 1493].  
**fields** [486, 678, 775, 978, 1172]. **Fife** [1029].  
**filament** [1472]. **fill** [591, 596]. **film**  
[29, 151]. **Filon** [1618, 568, 1569, 1617].  
**Filon-type** [1618, 1569, 1617]. **filters** [1504].  
**finance** [891]. **Finding**  
[546, 1081, 1162, 529]. **Finite**  
[32, 85, 163, 164, 158, 153, 155, 157, 178, 189,  
229, 296, 336, 361, 386, 531, 610, 630, 636,  
734, 747, 774, 778, 796, 880, 899, 975, 1006,  
1077, 1075, 1143, 1251, 1270, 1278, 1400, 1427,  
1498, 1497, 4, 20, 23, 24, 21, 25, 38, 53, 54, 56,  
58, 80, 81, 84, 86, 88, 89, 92, 108, 109, 110,  
115, 121, 135, 142, 143, 145, 159, 160, 161,  
162, 149, 148, 152, 154, 151, 169, 181, 186,  
188, 197, 202, 201, 204, 212, 211, 222, 224,  
223, 242, 244, 272, 275, 276, 280, 288, 329].  
**finite**  
[335, 360, 371, 368, 366, 370, 369, 377, 379,  
380, 381, 388, 387, 404, 405, 410, 424, 412,  
433, 438, 441, 443, 448, 456, 467, 491, 505, 511,  
530, 540, 554, 558, 582, 585, 584, 586, 589, 605,  
606, 614, 621, 620, 626, 632, 634, 639, 635, 645,  
651, 652, 653, 656, 655, 659, 672, 671, 673, 687,  
690, 688, 706, 715, 725, 735, 739, 741, 742, 744,  
748, 759, 758, 757, 793, 835, 836, 858, 860, 869,  
873, 874, 875, 903, 904, 911, 912, 915, 922, 955,  
979, 980, 981, 984, 990, 996, 995, 1000, 1017].  
**finite**  
[1020, 1024, 1025, 1026, 1032, 1036, 1037,  
1043, 1044, 1051, 1053, 1062, 1070, 1072,  
1083, 1086, 1087, 1094, 1098, 1097, 1106, 1105,  
1108, 1111, 1114, 1134, 1136, 1142, 1157, 1155,  
1154, 1172, 1173, 1179, 1206, 1207, 1214, 1215,  
1212, 1222, 1227, 1228, 1229, 1239, 1254, 1258,  
1262, 1263, 1264, 1272, 1274, 1276, 1284, 1287,  
1294, 1304, 1309, 1312, 1313, 539, 1328, 1342,  
1343, 1370, 1371, 1379, 1384, 1383, 1392, 1394,  
1395, 1397, 1398, 1408, 1419, 1424, 1432, 1433,  
1443, 1451, 1457, 1473, 1483, 1493, 1494, 1496,  
1500, 1519, 1521, 1528, 1557, 1562, 1564, 1574,  
1575, 1583, 1592, 1609, 1616, 1632, 1633].  
**finite**  
[1634, 1635, 1646, 1649, 1658, 501, 156, 853].  
**Finite-difference**  
[296, 1427, 4, 242, 404, 405, 659, 903, 996,  
995, 1157, 1155, 1154, 1239, 1258, 1493, 1564].  
**finite-dimensional** [441, 1024, 853].  
**Finite-element**  
[85, 163, 164, 178, 774, 778, 1077, 1075, 1270,  
1498, 1497, 24, 53, 58, 86, 142, 159, 160, 161,  
162, 149, 148, 151, 188, 204, 212, 275, 276,  
329, 335, 424, 433, 530, 582, 614, 634, 635,  
673, 748, 836, 869, 874, 912, 980, 1020, 1026,

1032, 1070, 1072, 1086, 1098, 1136, 1227, 1229, 1263, 1264, 1274, 1294, 1328, 1343, 1395, 1432, 1433, 1457, 1483, 1521, 1528, 1583]. **finite-element-based** [135]. **finite-part** [540, 558, 639, 1097, 1500, 1609]. **finite-range** [1106]. **Finite-volume** [386, 56, 276, 388, 387, 433, 456, 582, 586, 653, 735, 922, 1262, 1633]. **Finite-volume-element** [229]. **First** [1486, 14, 195, 256, 307, 308, 366, 370, 401, 622, 623, 797, 956, 1116, 1139, 1197, 1462, 1463]. **first-kind** [308]. **First-order** [1486, 14, 366, 370, 622, 623, 956, 1116]. **fits** [148]. **Fitted** [161, 601, 14, 922, 1454, 1574]. **fitting** [465, 479, 482, 493, 516, 556, 557, 1453]. **fixed** [531, 1222, 1481, 1482, 1553]. **Fletcher** [33, 506]. **Flexible** [496, 428]. **floating** [686, 900]. **floating-point** [686]. **flow** [23, 38, 146, 168, 172, 207, 263, 264, 289, 360, 419, 453, 612, 615, 633, 656, 689, 695, 732, 733, 748, 749, 859, 899, 1008, 1015, 1080, 1108, 1278, 1351, 1365, 1425, 1556]. **flow-box** [733]. **flow-erratum** [264]. **flows** [31, 29, 166, 215, 418, 467, 641, 764, 1058, 1136, 1426]. **fluid** [38, 85, 146, 612, 690, 691, 734, 748, 749, 1392, 1556]. **fluid-structure** [691, 734, 1392]. **fluidized** [439]. **fluids** [216, 899, 1264, 1370, 1263]. **flux** [147, 160, 162, 328, 425, 745, 914, 934, 1055, 1364, 1483]. **fluxes** [1212, 1273]. **Fock** [1033]. **forces** [151]. **form** [94, 299, 598, 873, 901, 1136]. **formal** [46]. **formalism** [435]. **forms** [401]. **formula** [107, 141, 382, 517, 1459, 1507, 1550, 1609]. **formulae** [30, 198, 376, 533, 558, 574, 575, 576, 699, 856, 909, 1160, 1204, 1320, 1366, 1380, 1480, 1479]. **formulas** [139, 324, 352, 707, 1034, 1293, 1508]. **formulation** [47, 146, 171, 209, 226, 250, 299, 340, 378, 634, 630, 734, 1206, 1282, 1342, 1564]. **formulations** [169, 261, 484, 599, 738, 801, 845]. **forth** [616]. **Fortin** [21]. **forward** [1222, 1235]. **Four** [1464, 1440, 1453]. **four-step** [1453]. **Fourier** [504, 684, 875, 958, 961, 1091, 1150, 1185, 1231, 1266, 1325, 1403, 1467, 1507]. **Fourier-finite-element** [875]. **Fourier-series** [504]. **Fourth** [242, 196, 404, 412, 586, 700, 756, 778, 808, 1166, 1217, 1454, 1465]. **Fourth-order** [242, 196, 404, 412, 586, 700, 756, 778, 808, 1166, 1217, 1465]. **Fox** [61, 592]. **fractal** [445]. **fractals** [11]. **Fractional** [1139, 76, 93, 248, 249, 323, 351, 361, 745, 825, 981, 1006, 1010, 1011, 1067, 1076, 1085, 1203, 1259, 1261, 1494]. **fractional-order** [1203]. **fractional-step** [1010, 1011]. **fractions** [256, 498]. **fracture** [289]. **fractured** [289]. **frame** [503, 1485]. **framework** [861]. **Francis** [783]. **Fredholm** [104, 195, 310, 487, 989, 1188]. **free** [8, 24, 236, 243, 426, 468, 532, 618, 678, 706, 717, 790, 842, 920, 1103, 1108, 1125, 1170, 1255, 1292, 1304, 1342, 1383, 1597, 1642]. **free-boundary** [8]. **frequencies** [304]. **frequency** [138, 565, 613, 885]. **frequency-dependent** [613]. **frequency-independent** [885]. **frictional** [144]. **frictionless** [19]. **friendly** [1449]. **front** [1098]. **front-tracking** [1098]. **Full** [18, 287, 1400]. **full-discretization** [287]. **Fully** [2, 139, 606, 461, 869, 904, 914, 1011, 1058, 1163, 1201, 1641, 524]. **function** [209, 256, 321, 373, 476, 517, 702, 703, 722, 767, 952, 1021, 1027, 1085, 1230, 1324, 1333, 1359, 1508, 1614]. **function-evaluation** [373]. **functional** [223, 311, 341, 683, 1657]. **functionals** [598, 1220, 1349]. **functions** [46, 180, 284, 303, 392, 427, 496, 497, 534, 533, 541, 556, 587, 643, 720, 785, 791, 810, 816, 844, 905, 941, 966, 1085, 1118, 1125, 1147, 1175, 1255, 1256, 1285, 1292, 1320, 1333, 1381, 1413, 1438, 1449, 1550, 1584, 1586, 1606]. **fundamental** [898, 1007, 1341]. **furnace** [204]. **Further** [17, 195, 1288, 1539].

**Galerkin**

[1259, 14, 24, 45, 47, 79, 80, 95, 104, 109, 116, 120, 132, 150, 171, 200, 222, 231, 298, 299, 307, 330, 337, 354, 358, 369, 394, 399, 422, 419, 411, 427, 431, 444, 445, 454, 467, 483, 512, 555, 567, 570, 613, 614, 647, 662, 685, 689, 713, 736, 759, 758, 755, 756, 754, 798, 819, 824, 911, 910, 912, 923, 989, 1000, 1009, 1049, 1053, 1054, 1074, 1076, 1101, 1114, 1145, 1151, 1149, 1174, 1217, 1216, 1227, 1252, 1254, 1261, 1268, 1280, 1309, 1312, 1313, 1337, 1355, 1356, 1394, 1420, 1422, 1425, 1464, 1462, 1463, 1469].

**Galerkin** [1477, 1531, 1567, 1579, 1582].

**Galerkin-Chebyshev** [1101].

**Galerkin-finite** [80]. **Galerkin-like** [1420].

**games** [252]. **gamma** [256]. **GAOR** [1578].

**gap** [315]. **gas** [777]. **gauge** [435, 1149].

**Gauss** [239, 332, 666, 901, 1232, 1293, 1349, 1480, 1479, 1507, 1532, 1591].

**Gauss-type** [1480, 1479].

**Gaussian** [99, 168, 362, 775, 1189, 1195, 1230, 1291, 1320, 1488, 1534].

**general** [272, 331, 421, 432, 552, 569, 586, 598, 645, 654, 925, 933, 1324, 1363, 1383].

**general-order** [1324]. **generalization**

[396, 470, 490, 967]. **Generalizations** [1167].

**Generalized**

[312, 558, 657, 947, 1048, 1128, 1581, 216, 218, 718, 792, 943, 1001, 1034, 1106, 1237, 1304].

**generated** [352]. **generates** [771].

**generating** [392]. **generation** [818, 1626].

**generator** [1148]. **genesis** [783]. **Geodesic**

[1398, 1391]. **geodesics** [1553]. **Geometric**

[309, 829, 918, 15, 122, 165, 626, 826, 939, 1426].

**Geometrically** [1204, 298].

**geometries** [1069]. **Geometry**

[468, 882, 1553]. **Gevrey** [1133]. **Gilbert**

[135, 136, 602]. **given** [652]. **Givens** [566].

**gives** [548]. **Global** [119, 269, 308, 345, 573, 577, 887, 907, 1446, 1523, 1563, 33, 718, 770, 806, 897, 930, 998, 1059, 1645, 1600].

**globally** [176, 906]. **GMRES** [124, 1518].

**GMWB** [929]. **Golub** [1168]. **good** [1191].

**Gordon** [1496, 435, 1530]. **Gottlieb** [1335].

**governing** [1574]. **Grad** [709]. **Grad-div**

[709]. **graded** [605]. **Gradient**

[281, 289, 583, 1070, 35, 50, 55, 90, 123, 166, 177, 234, 418, 483, 508, 509, 585, 667, 849, 967, 1094, 1177, 1278, 1361, 1369, 1455, 1560, 1608, 1645].

**gradient-like** [35, 418].

**gradient-multigrid** [1560]. **gradients**

[497]. **grading** [81, 740]. **Gram** [771].

**graph** [888, 1351]. **Graphs** [1383, 92].

**Green** [587]. **Grid** [292, 181, 206, 353, 385, 643, 818, 906, 1119, 1157, 1374, 655].

**grids** [89, 600, 706, 810, 844, 1109].

**Gross** [608, 750]. **ground** [667]. **groundwater**

[1108]. **group** [650, 836, 1619]. **groups**

[817, 1448, 1571]. **growing** [1154]. **growth**

[357, 1057]. **GSVD** [226]. **Guaranteed**

[1378, 1558, 484, 929]. **guard** [1289]. **Gupta**

[504]. **Gurtin** [285]. **gyrokinetic** [222].

**gyrokinetic-waterbag** [222].

**h** [884, 717]. **h-p** [884]. **Hadamard**

[540, 639, 1097, 1500]. **Hahn** [1459]. **half**

[1301, 1461]. **half-explicit** [1301]. **half-line**

[1461]. **Hamilton** [296, 314, 975, 1229].

**Hamiltonian** [460, 565, 1090, 1121, 1418].

**Hammerstein** [728, 1061]. **hand**

[1499, 1518]. **Handling** [494, 501]. **hanging**

[24]. **Hankel** [441, 953]. **Hardy** [1508].

**harmonic** [484, 747, 1153, 1376]. **Hartree**

[1033]. **having** [478]. **HDC**

[413, 451, 453, 452, 488, 717, 1363, 421].

**heat** [20, 213, 276, 410, 1050]. **Heath** [1052].

**Hele** [634]. **Helfrich** [801]. **Helfrich-type**

[801]. **Helmholtz**

[138, 261, 416, 488, 722, 1254, 1471, 1607].

**hemivariational** [499]. **Hermite**

[98, 559, 666, 750, 1245, 1393, 1541].

**Hermite-type** [559]. **Hermitian** [127, 712].

**Hessian** [716, 1602]. **Hessians** [437].

**Heston** [43]. **Heterogeneous**

[304, 2, 552, 654, 1403]. **hexagons** [793].

**hexahedral** [201]. **Hierarchical**

[138, 359, 292, 317, 1159]. **High**

[261, 346, 406, 407, 443, 526, 575, 576, 1043, 1163, 1239, 1276, 1616, 1641, 13, 79, 138, 236,

244, 254, 284, 328, 613, 739, 848, 866, 877, 935, 936, 961, 962, 1087, 1498, 1497, 1607, 1605]. **High-accuracy** [406, 407]. **high-contrast** [328]. **High-dimensional** [443, 1616]. **high-frequency** [138, 613]. **High-order** [261, 526, 575, 576, 1043, 1163, 1239, 1276, 1641, 79, 236, 244, 254, 739, 866, 877, 1087, 1498, 1497, 1605]. **Higher** [1036, 1044, 179, 1398, 1434, 1561, 1634, 1552]. **Higher-order** [1036, 179, 1434, 1634, 1552]. **highly** [304, 310, 315, 460, 565, 568, 958, 959, 1109, 1292, 1569, 1617, 1618]. **highly-oscillating** [958, 959]. **Hilbert** [779, 1221, 1385, 1523, 1534]. **Hilliard** [1075, 95, 155, 554, 803, 1262]. **Hodge** [250, 722]. **HODIE** [448]. **hodograph** [675, 677]. **Hölder** [1365]. **Holm** [1581]. **holomorphic** [459]. **homoclinic** [228, 711, 1399, 1415]. **homogeneous** [701]. **homogenization** [565]. **homogenized** [616]. **homotopy** [440, 535]. **Hood** [292]. **Hopf** [403, 799, 811, 1187, 1612]. **horizons** [1105]. **Householder** [1533]. **hp** [23, 220, 615, 844, 912, 1425, 1529, 1653, 758, 617, 1426]. **hp-adaptive** [1653]. **hp-approximations** [1529]. **hp-DGFEM** [1426]. **hp-FEM** [1425, 617]. **hp-finite** [23]. **hp-functions** [844]. **hp-version** [220, 912, 758]. **human** [15]. **Hybrid** [486, 697, 1164, 1165, 1238, 1392, 289, 614, 615, 654, 1430]. **hybrid-dimensional** [289]. **hybridizable** [570]. **hyper** [682]. **hyper-singular** [682]. **Hyperbolic** [701, 232, 389, 430, 466, 571, 582, 652, 948, 973, 995, 1216, 1394, 1473, 1481, 1482, 1526]. **hyperbolics** [956]. **hypercube** [391]. **hyperelastic** [1441]. **hyperinterpolation** [864]. **hypersingular** [359, 398, 431, 884]. **hysteresis** [1559].

**identification** [1170]. **II** [13, 113, 149, 467, 577, 635, 761, 807, 854, 954, 959, 1356, 1426, 1436, 1480, 1498, 1562]. **III** [962, 1130]. **ill** [114, 1501]. **ill-conditioned** [114, 1501]. **IMA** [407, 576, 622, 1165, 1482, 1618, 462]. **image** [631]. **IMEX** [1388]. **IMEX-RK** [1388]. **immersed** [835, 836, 926]. **impact** [492, 1352, 1375]. **impedance** [747, 984]. **implementation** [12, 124, 937, 972, 1367]. **Implicit** [381, 1470, 1564, 31, 29, 30, 28, 128, 202, 216, 232, 323, 331, 334, 346, 350, 376, 446, 474, 473, 530, 632, 705, 768, 870, 908, 976, 1140, 1258, 1302, 1402, 1404, 1440, 1510, 1575]. **implicit-explicit** [28]. **implicitly** [1208]. **implies** [1492]. **imposition** [243]. **Improved** [585, 1593, 134, 154, 1622, 1544]. **improvement** [264, 346, 1023]. **Improving** [111, 1547, 1060]. **including** [86, 1365]. **inclusion** [300, 628]. **inclusions** [1223]. **incompatible** [695]. **incomplete** [1307]. **incompressible** [23, 87, 215, 216, 243, 641, 691, 764, 843, 859, 870, 897, 1072, 1096, 1136, 1263, 1264, 1363, 1426, 1470]. **Increasing** [1245]. **indefinite** [594, 1377, 1177, 1190, 1484]. **indenting** [158]. **independent** [775, 885]. **Index** [62, 64, 66, 69, 71, 73, 450, 1031, 1079, 1301, 1429, 1444]. **indicator** [208, 756, 910]. **induction** [204, 1036, 1110]. **industry** [820]. **inequalities** [50, 77, 119, 169, 223, 562, 796, 880, 1054, 1319, 1330, 1511]. **inequality** [420, 499, 632, 634, 778, 902]. **Inertial** [1552]. **Inexact** [234, 247, 33, 91, 245, 414, 712, 730, 1603]. **inextensible** [172, 174, 175]. **Inf** [292, 1072, 1194]. **Inf-sup** [292, 1072, 1194]. **infinite** [441, 828, 1105, 1176, 1412, 1449, 1456]. **infinite-dimensional** [1456]. **infinitely** [1324]. **inflation** [1441]. **inhomogeneous** [668, 981, 1486]. **initial** [41, 42, 272, 372, 430, 769, 932, 968, 1561, 1615, 1551, 1545, 1546]. **initial-** [272]. **initial-value** [1561, 1546]. **input** [203]. **instability** [1455, 1492]. **Instance** [1051]. **integral** [99, 104, 102, 106, 191, 195, 221, 225, 260,

- 261, 305, 309, 307, 310, 308, 341, 352, 359, 396, 395, 394, 398, 416, 431, 487, 490, 521, 559, 562, 642, 682, 728, 760, 798, 797, 822, 845, 884, 923, 946, 965, 989, 1047, 1073, 1079, 1082, 1092, 1138, 1139, 1186, 1188, 1197, 1200, 1282, 1340, 1373, 1407, 1411, 1437, 1464, 1461, 1462, 1463, 1480, 1479, 1484, 1569, 1593, 1599, 1628, 1513, 1549]. **integrals** [256, 401, 485, 540, 558, 568, 598, 639, 905, 909, 958, 959, 1097, 1198, 1338, 1449, 1500, 1609]. **integrating** [41, 42]. **integration** [12, 122, 192, 351, 357, 376, 553, 604, 736, 743, 753, 781, 799, 849, 1004, 1033, 1052, 1204, 1292, 1434]. **integrator** [136, 595, 1579]. **integrator-based** [1579]. **integrators** [236, 259, 315, 339, 346, 460, 646, 850, 883, 907, 1084, 1090, 1089, 1134, 1199, 1280, 1418, 1439, 1510, 1537]. **integro** [116, 708, 729, 918, 1076, 1151, 1164, 1165, 1260, 1312, 1314, 1371, 1394, 1509, 1599, 1643]. **integro-differential** [116, 708, 729, 918, 1076, 1151, 1164, 1165, 1260, 1312, 1371, 1394, 1509, 1599]. **integrodifferential** [133, 306]. **integroparabolic** [5]. **intensities** [203]. **interacting** [1351]. **interaction** [85, 690, 691, 734, 915, 916, 1106, 1612]. **interactions** [100]. **interest** [1052]. **interface** [329, 328, 336, 570, 739, 836, 926, 942, 1087, 1144, 1457]. **interfaces** [161, 289, 637, 654, 1392]. **Interior** [329, 819, 290, 327, 689, 759, 758, 782, 823, 930, 978]. **Interior-penalty-stabilized** [329]. **interlocking** [458]. **intermediate** [1649]. **interpolant** [321, 543]. **interpolants** [807, 1180, 1186, 1187, 1306, 1333, 1468]. **interpolate** [952]. **interpolated** [410]. **interpolating** [40, 1316, 1541]. **Interpolation** [274, 313, 335, 516, 1126, 1448, 82, 97, 107, 181, 282, 303, 319, 374, 415, 468, 469, 513, 542, 541, 544, 609, 676, 675, 678, 681, 700, 702, 743, 786, 809, 892, 971, 992, 1002, 1085, 1169, 1183, 1219, 1279, 1308, 1357, 1393, 1475, 1614]. **interpolations** [1650]. **Interpolatory** [1500, 184, 817, 1619]. **interval** [447, 534, 988, 1097, 1543]. **introduced** [954]. **introduction** [1148]. **invariance** [714]. **invariant** [287, 1503]. **inverse** [382, 417, 440, 659, 680, 682, 712, 796, 1208, 1382, 1458]. **inverse-type** [796]. **inverses** [1042, 1540]. **Inversion** [588, 795, 301, 1265, 1385]. **inverting** [1275]. **investigation** [1130]. **involution** [1115, 1536]. **involved** [591, 596]. **Involving** [889, 76, 597, 1193]. **IRK** [718]. **irregular** [1269, 959]. **irreversible** [526]. **isoclinal** [1196]. **Isogeometric** [291, 293, 292]. **isolated** [34]. **Isoparametric** [53, 715, 301, 677]. **isothermal** [1020]. **Isotropic** [975]. **Iterated** [798, 305, 953, 1360]. **iterates** [346]. **iteration** [127, 126, 173, 474, 683, 707, 712, 797, 938, 1078, 1091, 1208, 1506, 1551]. **iterations** [1110, 1455]. **Iterative** [476, 622, 623, 890, 985, 1447, 528, 94, 96, 185, 199, 479, 641, 778, 838, 1023, 1038, 1268, 1409, 1556, 1630, 1631]. **iteratively** [239]. **IV** [935]. **J** [407, 462, 576, 622, 1165, 1482]. **Jacobi** [975, 1229, 296, 314, 581, 1459, 1534]. **Jacobi/elliptic** [296]. **Jacobian** [492]. **Jarrow** [1052]. **John** [783]. **Jordan** [27, 627]. **Journal** [1618]. **jump** [550]. **jumps** [1651]. **Kamel** [886]. **Kantorovich** [839, 1571]. **Kármán** [369]. **Keller** [224, 1395]. **kernel** [500, 559, 1260, 1385, 1407, 1462, 1463, 1569, 1623]. **kernels** [274, 306, 396, 1195, 1509]. **kind** [37, 104, 191, 195, 256, 307, 308, 798, 797, 923, 989, 1139, 1188, 1197, 1320, 1464, 1462, 1463, 1513, 1549]. **kinetic** [251, 1527]. **Kirchhoff** [139]. **Klein** [435, 1496, 1530]. **knots** [590, 920, 1125, 1255, 1316]. **Kolmogorov** [459]. **Korteweg** [765, 904, 1066, 1422]. **Kronrod** [1232].



**Krylov** [681, 1208, 1335]. **Kublanovskaya** [783]. **Kuramoto** [5, 29, 1131]. **Kuramoto-Sakaguchi** [5]. **Kutta** [574, 575, 576, 1440, 131, 191, 323, 333, 345, 346, 350, 376, 474, 470, 471, 472, 473, 573, 577, 611, 813, 855, 887, 917, 924, 951, 1059, 1121, 1182, 1280, 1302, 1404, 1417, 1429, 1454, 1481, 1482, 1561, 1594, 1643, 944, 1549, 1543]. **Kutta-type** [1121].

**L** [1142]. **L-shaped** [1142]. **L.** [61]. **L.M.F.** [393]. **L.M.F.-based** [393]. **l.s.d** [1539]. **Lagrange** [132, 329, 892, 971, 1355, 1356, 1541]. **Lagrangian** [200, 940, 1362, 1570, 1572]. **Lagrangians** [698, 1080]. **Laguerre** [937, 1331, 1187, 1581]. **Laguerre-type** [937]. **Lambert** [1402]. **Lamé** [1273]. **laminar** [1008]. **Lanczos** [941, 1318]. **Landau** [602, 135, 136, 446]. **Langevin** [1039, 1088, 1236]. **Langevin-type** [1236]. **LAPACK** [890]. **Laplace** [101, 330, 579, 680, 1202, 1203, 1385, 1442, 1471]. **Laplacian** [56, 76, 186, 250, 1067, 1275, 539]. **large** [644, 789, 979, 980, 1103, 1168, 1211, 1209, 1210, 1318, 1452, 1606, 1651]. **large-scale** [644, 789, 1103, 1209, 1210, 1452]. **large-time** [980]. **later** [783]. **lateral** [1351]. **lattice** [347, 435, 1148]. **Laurent** [1185]. **law** [287]. **laws** [389, 445, 475, 851, 878, 879, 914, 1014, 1037, 1216, 1427, 1443, 1473, 1526, 1641]. **Lawson** [41]. **Lax** [1132, 1525]. **Layer** [1117, 1529]. **Layer-adapted** [1117]. **layers** [1124, 1214]. **LBB** [825]. **LCP** [930]. **leading** [1321, 1538]. **leapfrog** [947]. **Least** [481, 547, 1228, 1647, 114, 190, 280, 391, 447, 478, 482, 493, 697, 1125, 1168, 1190, 1237, 1299, 1298, 1416, 1425, 1486, 1499, 1595, 1638]. **Least-change** [1647]. **Least-squares** [481, 114, 280, 391, 447, 482, 493, 1416, 1499]. **Lebesgue** [846, 971, 1512]. **leg** [826]. **Legendre** [852, 1101, 1331, 1186, 1324]. **Legendre-Laguerre** [1331]. **Leja** [971, 1512]. **Leslie** [592]. **level** [417, 450, 651, 656, 973, 1009, 1207, 1281, 1444, 1511, 1624]. **level-index** [450, 1444]. **Lévy** [1037, 1507]. **lexicographic** [901]. **library** [1285]. **Lie** [383, 549, 817, 1199, 1571, 1619]. **Lie-algebraic** [383]. **Lifschitz** [602]. **Lifshitz** [135, 136, 446]. **like** [35, 418, 889, 1101, 1102, 91, 954, 1420]. **limit** [1496]. **limited** [494, 495]. **limiting** [785, 934]. **limits** [321]. **Lindelöf** [938]. **line** [33, 395, 426, 939, 1461, 1532]. **Linear** [379, 792, 1192, 1492, 1545, 16, 19, 39, 41, 42, 50, 54, 60, 59, 94, 106, 114, 116, 125, 123, 126, 136, 140, 169, 181, 199, 236, 271, 538, 331, 337, 366, 381, 391, 420, 422, 412, 411, 430, 447, 452, 477, 478, 495, 498, 508, 519, 541, 569, 572, 579, 609, 641, 645, 718, 721, 736, 773, 779, 794, 800, 824, 872, 890, 895, 896, 912, 930, 925, 933, 948, 972, 999, 1010, 1038, 1078, 1094, 1114, 1117, 1125, 1137, 1139, 1140, 1158, 1168, 1172, 1176, 1217, 1220, 1222, 1235, 1286, 1298, 1321, 1330, 1344, 1349, 1374]. **linear** [1412, 1416, 1445, 1465, 1466, 1499, 1536, 1580, 1575, 1579, 1584, 1585, 1587, 1592, 1607, 1616, 1623, 1627, 1637, 1646, 1655, 945, 1130]. **Linearization** [44, 1541, 1470]. **linearized** [801, 1075]. **Linearly** [31, 29, 1140, 1402, 144, 323, 1302, 1510]. **lines** [1657]. **linogram** [1339]. **Lions** [380, 1144]. **Liouville** [196, 233, 270, 659, 720, 763, 808, 907, 1359]. **Lipschitz** [10, 816]. **Lissajous** [257]. **loading** [250]. **Lobatto** [1480]. **Lobatto-Chebyshev** [1480]. **Local** [18, 97, 510, 692, 693, 1194, 1475, 1595, 1614, 87, 190, 282, 308, 317, 337, 358, 411, 549, 555, 617, 930, 994, 1018, 1205, 1217]. **Locality** [702]. **Localization** [660]. **Localized** [197, 1055, 900, 1570]. **locally** [24, 647, 816, 844, 1558]. **locating** [46]. **location** [518, 1353]. **Locking** [1433, 1597]. **Locking-free** [1597]. **locus** [130].

**logarithm** [650]. **logarithmic** [1407, 1462, 1463]. **logarithmic-kernel** [1407]. **logging** [1400]. **Long** [713, 751, 1433]. **Long-time** [713, 751]. **Lorentz** [1149]. **loss** [686]. **Low** [765, 1338, 1397, 38, 87, 117, 138, 511, 1111]. **low-** [138]. **Low-order** [1338, 1397, 38, 87, 511]. **low-rank** [117]. **lower** [1451, 1656]. **lowers** [1588]. **lowest** [569]. **lowest-order** [569]. **lumped** [1274]. **Lyapunov** [857, 1208, 1456, 1563]. **Lyness** [46].

**m** [273]. **m-DDFV** [273]. **MAC** [774]. **MacCamy** [285]. **Mach** [765]. **Maclaurin** [1266]. **macroelement** [293]. **magic** [743]. **magnetic** [1036]. **magnetodynamic** [484]. **magnetostriction** [136]. **Magnus** [236, 1084]. **majorant** [692, 693]. **MALA** [258]. **manifold** [423, 1620]. **manifold-based** [423]. **manifold-valued** [1620]. **manifolds** [15, 128, 269, 516, 536, 693, 816, 957, 994, 1099, 1129, 1244, 1270, 1340, 1552]. **many** [681]. **map** [137]. **mapping** [390, 724, 1035, 1092]. **mappings** [459, 625, 1458, 1571]. **maps** [1178]. **marching** [1367]. **Markov** [457, 1078]. **Maruyama** [1071, 1269]. **Mason** [1308]. **mass** [95, 723, 745, 1122, 1120, 1274, 1365, 1582]. **mass-preserving** [1122, 1120]. **matching** [380]. **material** [853]. **materials** [144, 1466]. **matrices** [27, 110, 194, 277, 396, 408, 417, 429, 440, 481, 594, 1377, 682, 795, 848, 921, 960, 1148, 1196, 1347, 1488, 1540, 1553, 1554, 1578, 1590, 1604, 1606, 1625, 527, 529]. **Matrix** [409, 588, 1211, 17, 36, 44, 125, 138, 153, 247, 255, 289, 383, 492, 591, 596, 682, 683, 727, 761, 787, 833, 893, 891, 939, 941, 974, 988, 987, 1046, 1110, 1218, 1358, 1362, 1382, 1438, 1458, 1541, 1582, 1588, 1600, 1654, 1655, 1656]. **matrix-fracture** [289]. **matrix-inverse** [1458]. **maximal** [324]. **Maximum** [30, 1040, 1203, 1380, 670, 1644]. **Maximum-norm** [1203]. **Maxwell** [241, 244, 266, 435, 443, 484, 606, 747, 819, 1074, 1149, 1153]. **Maxwell-type** [443]. **Mean** [411, 638, 633, 656, 689, 939, 1058, 1493]. **Mean-square** [411]. **means** [57, 1373]. **measurements** [193]. **mechanical** [304]. **media** [207, 244, 289, 360, 748, 749, 1074, 1365]. **medium** [1082]. **Medius** [366]. **Mellin** [1368]. **membrane** [158]. **membranes** [187, 1441]. **memory** [494, 495, 828, 1635]. **Mesh** [1601, 14, 81, 449, 599, 601, 618, 826, 837, 1114, 1155, 1205, 1652]. **mesh-free** [618]. **meshes** [24, 159, 220, 246, 275, 288, 298, 309, 380, 415, 421, 552, 605, 648, 653, 654, 709, 796, 918, 1062, 1063, 1072, 1117, 1124, 1126, 1143, 1226, 1363, 1387, 1426, 1432, 1495, 1529, 1565, 1608, 1626, 1632, 1633, 1634]. **Meshing** [55]. **metastable** [363, 1501]. **Method** [18, 940, 2, 4, 7, 8, 15, 33, 81, 86, 87, 90, 92, 104, 102, 112, 113, 118, 119, 130, 132, 128, 159, 149, 148, 186, 188, 202, 204, 205, 210, 218, 220, 226, 229, 232, 231, 233, 238, 239, 243, 265, 266, 268, 272, 278, 290, 538, 327, 330, 328, 340, 349, 371, 385, 390, 399, 402, 404, 405, 414, 409, 422, 413, 419, 412, 411, 426, 431, 432, 434, 438, 440, 444, 445, 451, 476, 490, 494, 506, 508, 509, 507, 511, 521, 530, 536, 554, 559, 569, 570, 578, 579, 582, 584, 589, 606, 614, 615]. **method** [618, 621, 624, 627, 628, 629, 644, 647, 649, 651, 658, 657, 661, 665, 664, 672, 671, 673, 674, 684, 685, 687, 690, 688, 692, 693, 706, 719, 722, 725, 727, 735, 736, 737, 742, 748, 750, 759, 762, 770, 773, 779, 786, 790, 805, 811, 819, 823, 832, 838, 839, 847, 858, 860, 863, 865, 869, 867, 874, 875, 881, 884, 885, 886, 900, 903, 928, 926, 927, 922, 929, 939, 943, 967, 968, 972, 980, 984, 983, 993, 1000, 1001, 1006,

1007, 1015, 1014, 1020, 1023, 1025, 1028, 1035, 1043, 1046, 1054, 1056, 1057, 1061, 1069].

**method**  
 [1076, 1079, 1086, 1087, 1092, 1098, 1101, 1102, 1099, 1106, 1108, 1112, 1114, 1119, 1120, 1142, 1144, 1146, 1145, 1150, 1149, 1158, 1161, 1170, 1181, 1191, 1197, 1201, 1205, 1215, 1217, 1227, 1238, 1240, 1248, 1254, 1260, 1258, 1259, 1272, 1274, 1277, 1282, 1287, 1296, 1297, 1301, 1304, 1309, 1311, 1315, 539, 1323, 1326, 1334, 1335, 1337, 1341, 1354, 1355, 1356, 1363, 1367, 1369, 1371, 1395, 1397, 1408, 1424, 1442, 1449, 1454, 1457, 1464, 1462, 1463, 1465, 1469, 1471, 1472, 1477, 1491, 1495, 1494, 1496, 1507, 1511, 1562, 1577, 1574, 1571, 1581, 1575, 1579, 1587, 1591, 1616, 1622, 1621, 1624, 1623, 1631, 1632].

**method** [1640, 1645, 1652, 1657, 502].

**Methods**  
 [383, 588, 31, 28, 37, 41, 42, 46, 48, 50, 49, 80, 89, 91, 94, 96, 100, 120, 125, 123, 127, 126, 129, 131, 133, 140, 150, 161, 177, 180, 185, 190, 191, 195, 197, 219, 222, 230, 234, 242, 244, 245, 247, 271, 276, 292, 298, 304, 306, 309, 315, 323, 329, 331, 332, 333, 334, 336, 337, 345, 347, 346, 350, 351, 353, 354, 355, 357, 356, 358, 359, 366, 370, 369, 384, 395, 400, 406, 407, 410, 425, 418, 421, 427, 454, 453, 452, 457, 462, 463, 465, 464, 474, 470, 471, 472].

**methods**  
 [473, 479, 483, 488, 491, 497, 503, 520, 526, 535, 552, 560, 563, 573, 577, 601, 622, 623, 625, 642, 645, 660, 662, 668, 680, 683, 687, 689, 697, 710, 716, 717, 718, 724, 753, 758, 755, 764, 776, 782, 803, 804, 806, 813, 827, 826, 835, 843, 846, 854, 853, 876, 887, 908, 912, 915, 917, 924, 925, 923, 932, 933, 955, 947, 949, 951, 954, 957, 965, 981, 989, 990, 1004, 1005, 1008, 1009, 1026, 1049, 1051, 1053, 1066, 1067, 1070, 1073, 1077, 1082, 1103, 1105, 1109, 1123, 1121, 1131, 1135, 1137, 1139, 1151, 1154, 1162, 1163].

**methods**  
 [1164, 1165, 1166, 1167, 1174, 1177, 1179, 1182, 1188, 1192, 1196, 1214, 1212, 1216, 1220, 1222, 1229, 1236, 1251, 1261, 1268, 1280, 1281, 1286, 1302, 1312, 1314, 1338, 1346, 1359, 1379, 1389, 1394, 1400, 1402, 1403, 1407, 1417, 1420, 1422, 1429, 1430, 1431, 1434, 1435, 1436, 1440, 1447, 1452, 1453, 1461, 1473, 1476, 1481, 1482, 1490, 1498, 1497, 1509, 1519, 1523, 1542, 1556, 1561, 1566, 1570, 1578, 1569, 1567, 1572, 1585, 1593, 1594, 1602, 1613, 1605, 1617, 1618, 1633, 1634, 1636, 1642, 1646, 1643, 1651, 1653, 550, 501, 528, 944, 1513, 1549, 1543, 1544, 1545, 1548, 1546, 1547].

**methods-overcoming** [876]. **metric** [50, 400, 1638]. **MHD** [870]. **MHSS** [126]. **micromagnetism** [603]. **mild** [299]. **mild-weak** [299]. **mimetic** [501]. **mini** [111]. **mini-element** [111]. **minimal** [120, 198, 972, 1253]. **minimax** [519, 1183, 1654]. **minimization** [173, 176, 195, 367, 509, 804, 1027, 1345, 1428, 1520, 1523]. **minimizers** [1652]. **minimum** [548, 929, 1396]. **Mitchell** [814].

**Mixed**  
 [209, 794, 1172, 1173, 1229, 1384, 1426, 6, 23, 89, 132, 169, 202, 205, 210, 214, 250, 280, 299, 340, 349, 368, 377, 378, 552, 554, 582, 584, 586, 601, 614, 672, 671, 673, 687, 690, 728, 748, 773, 1015, 1074, 1212, 1312, 1342, 1430].

**mixing** [258]. **mobility** [153]. **mode** [100, 1612]. **model** [15, 43, 152, 153, 154, 157, 204, 211, 207, 224, 240, 253, 360, 370, 381, 387, 424, 433, 439, 638, 630, 631, 688, 745, 765, 1020, 1052, 1104, 1116, 1127, 1152, 1155, 1172, 1313, 1370, 1400, 1466, 1493, 1635, 156]. **modeled** [48]. **modeling** [1076]. **modelling** [26, 121, 499, 1395, 1441]. **models** [22, 170, 285, 456, 587, 635, 760, 806, 1376]. **modes** [882]. **Modification** [876, 658, 1168]. **modifications** [1320]. **modified** [133, 423, 771, 784, 965, 972, 1112, 1113, 1181, 1280, 1471, 1639, 1645, 1549, 961, 1615]. **Modulated** [1403]. **modulus** [561]. **molecular** [1088, 1537]. **mollification** [9]. **Mollifications** [854]. **Moment**

[250, 1292, 1105]. **Moment-free** [1292]. **Monge** [108]. **Mono** [376]. **Mono-implicit** [376]. **Monotone** [1169, 125, 467, 818, 824, 1103, 1152, 1223]. **monotonic** [500, 542, 543, 809, 1623]. **monotonicity** [547]. **Monotonous** [34]. **monotony** [624]. **monotony-preserving** [624]. **Monte** [781, 1067, 1161]. **Morley** [725, 1624]. **Morse** [418]. **mortar** [112, 113, 188, 208, 266, 874, 919, 927]. **mortaring** [875]. **Morton** [1052]. **motion** [361, 1281, 1313]. **motivated** [742]. **moving** [599, 634, 674, 906, 979, 980, 1155, 1228, 1237, 1583, 1595]. **moving-boundary** [634]. **MPFA** [360]. **MR** [407, 462, 576, 622, 1165, 1482]. **Multi** [432, 1121, 29, 122, 152, 153, 154, 240, 906, 1033, 1120, 1443]. **multi-component** [152, 153, 154, 240]. **multi-configuration** [1033]. **multi-dimensional** [29, 1120, 1443]. **multi-grid** [906]. **Multi-product** [432]. **Multi-symplectic** [1121, 122]. **multicomponent** [803]. **Multidimensional** [1093, 587, 674, 1356, 1388, 1413]. **multidomain** [721, 1205]. **multifacility** [518]. **Multigrid** [451, 1476, 119, 640, 786, 788, 804, 901, 942, 1326, 1560, 1613, 1640, 1651]. **multigrid-type** [786]. **multilag** [133, 965]. **Multilevel** [110, 298, 678, 546, 1303, 1621]. **multiparameter** [302]. **multiphase** [766]. **multiphysics** [688]. **multiple** [2, 189, 505, 917, 1213, 1231, 1499, 1622]. **Multiplicative** [1358, 96, 646, 1053, 1122, 1134]. **multiplier** [329]. **multipliers** [919]. **multiply** [1035]. **multiply-connected** [1035]. **multipole** [1282]. **multiprocessor** [391]. **multiquadric** [181, 681]. **multiquadrics** [319]. **Multiscale** [427, 2, 146, 304, 443, 914, 1100, 1403, 1605, 1616]. **multisplitting** [125]. **multistate** [1104]. **Multistep** [356, 895, 948, 957, 28, 140, 271, 538, 357, 477, 968, 1137, 1139, 1286, 1428, 1543, 1545]. **multivalued** [334]. **multivalued** [1223]. **multivariate** [479, 553, 753, 817, 962]. **Mysovskii** [91]. **Naghdi** [211]. **narrow** [415, 530]. **Natural** [221, 134, 1375]. **Navier** [7, 18, 87, 111, 121, 179, 210, 206, 209, 349, 673, 684, 726, 831, 869, 897, 998, 1363, 1470]. **Near** [198, 1183, 1184, 1185, 1306, 1429]. **Near-best** [1184, 1185, 1306]. **Near-minimal** [198]. **Near-minimax** [1183]. **nearest** [255, 891, 1362]. **nearly** [687, 1072, 1355, 1356]. **nearness** [36]. **negative** [247, 270, 718]. **Neumann** [83, 118, 137, 159, 163, 189, 260, 386, 664, 695, 1178, 1234, 1529, 1573, 1596]. **neutral** [34, 320]. **neutron** [1161]. **newest** [740]. **Newton** [15, 45, 91, 96, 124, 239, 245, 255, 278, 414, 536, 644, 657, 685, 692, 693, 803, 804, 839, 1042, 1046, 1078, 1099, 1097, 1112, 1248, 1577, 1571, 1591, 1602, 1609, 1647, 1648, 1551]. **Newton-like** [91]. **Newton-Mysovskii-type** [91]. **Newtonian** [215, 216, 467]. **Newtonlike** [1636]. **NEWUOA** [1345]. **Nicolson** [792, 983, 1149, 1375]. **Nitsche** [243, 328, 434, 874, 875]. **no** [407, 462, 564, 576, 591, 596, 622, 1165, 1482]. **no-fill** [591, 596]. **nodes** [24, 324, 1231, 1480, 1479, 1532]. **noise** [646, 1037, 1053, 1122, 1134, 1246, 1575]. **noisy** [114, 643]. **Non** [267, 988, 1302, 10, 81, 106, 178, 247, 337, 380, 567, 579, 620, 736, 930, 987, 994, 1078, 1111, 1112, 1140, 1144, 1151, 1172, 1178, 1211, 1223, 1272, 1466, 1652]. **Non-autonomous** [988]. **non-conforming** [81, 620, 1111, 1272]. **non-Fickian** [178]. **non-interior** [930]. **non-linear** [106, 337, 579, 736, 1078, 1140, 1172, 1466]. **non-Lipschitz** [10]. **non-matching** [380]. **non-monotone** [1223]. **non-negative** [247]. **non-overlapping** [1144]. **non-periodic**

- [132]. **non-self-adjoint** [1178].  
**Non-smooth** [1302, 994, 1652].  
**non-standard** [1151]. **non-stationary** [567]. **non-symmetric** [987, 1112, 1211].  
**Non-variational** [267]. **Nonasymptotic** [258]. **Nonautonomous** [271, 236, 432, 925, 1031]. **noncoercive** [386]. **noncompact** [394, 1186].  
**Nonconforming** [365, 1294, 21, 169, 355, 379, 421, 511, 654, 991, 1227, 1378, 1495, 1624].  
**nonconservative** [1406]. **nonconstant** [943]. **nonconvex** [269, 373, 1017, 1523].  
**nondefectivity** [1554]. **nondiscrete** [1110].  
**nonequilibrium** [1088]. **nonhomogeneous** [665]. **Nonlinear** [1364, 524, 3, 20, 30, 28, 84, 102, 122, 190, 207, 218, 353, 410, 425, 438, 469, 473, 475, 493, 496, 512, 523, 549, 567, 604, 606, 608, 652, 661, 670, 672, 683, 685, 697, 729, 730, 738, 746, 749, 751, 752, 805, 812, 820, 864, 878, 879, 902, 903, 946, 949, 972, 1000, 999, 1007, 1016, 1019, 1103, 1108, 1130, 1207, 1209, 1210, 1216, 1221, 1233, 1234, 1257, 1274, 1309, 1348, 1406, 1423, 1467, 1503, 1530, 1531, 1602, 1624, 1647, 1643, 1654].  
**nonlinearities** [1365]. **Nonlocal** [11, 238, 587]. **nonmatching** [89, 275].  
**nonmonotone** [426, 939]. **nonnegative** [392, 489, 857]. **nonnormality** [225].  
**Nonoverlapping** [273, 1630]. **nonperiodic** [1316]. **nonpolygonal** [25]. **nonpositive** [494]. **nonresidual** [375]. **Nonsimple** [1478]. **nonsingular** [795]. **nonsingularity** [1554]. **Nonsmooth** [803, 816, 416, 497, 804, 982, 1027, 1028, 1603, 1615, 1637, 1513].  
**nonstandard** [822]. **nonstationary** [354, 1386]. **nonstiff** [1286]. **nonsymmetric** [834, 1104]. **nonuniform** [24, 449, 1001, 1003]. **nonunisolvent** [374].  
**norm** [30, 77, 422, 660, 819, 864, 1040, 1203, 1238, 1396, 1458]. **normal** [531, 921].  
**normalized** [667]. **norms** [17, 93, 512, 761, 1390, 1600]. **note** [219, 280, 321, 453, 458, 591, 596, 758, 934, 1102, 1387, 1405, 1509]. **novel** [1574].  
**nuclear** [433]. **number** [118, 194, 260, 674, 1607]. **numbers** [429, 1606]. **Numer** [407, 462, 576, 622, 1165, 1482]. **numerator** [541]. **Numerical** [26, 100, 144, 165, 170, 166, 193, 204, 203, 228, 240, 248, 249, 341, 363, 377, 416, 425, 414, 455, 457, 462, 463, 466, 485, 499, 638, 631, 637, 648, 695, 710, 711, 716, 723, 728, 733, 751, 763, 857, 893, 905, 969, 986, 997, 1024, 1045, 1046, 1047, 1052, 1080, 1131, 1233, 1281, 1336, 1373, 1480, 1479, 1501, 1559, 1585, 1618, 11, 101, 103, 106, 105, 107, 108, 121, 122, 187, 192, 227, 233, 251, 253, 278, 277, 302, 305, 312, 357, 376, 390, 396, 398, 418, 446, 460, 490, 579, 601, 604, 628, 684, 694].  
**numerical** [705, 724, 726, 746, 762, 808, 813, 829, 828, 868, 892, 898, 932, 943, 949, 958, 959, 988, 1000, 1066, 1084, 1105, 1115, 1123, 1127, 1130, 1133, 1152, 1158, 1164, 1165, 1188, 1200, 1203, 1204, 1218, 1253, 1260, 1271, 1292, 1315, 1352, 1368, 1370, 1385, 1399, 1411, 1415, 1416, 1422, 1423, 1434, 1452, 1453, 1454, 1460, 1473, 1507, 1535, 1536, 1560, 1563, 1605, 550, 1551, 1549].  
**Numerically** [782, 527, 612, 854, 853].  
**numerics** [616, 820]. **Nyström** [521, 1186, 261, 574, 575, 576, 579, 799, 1026, 1187, 1354, 1440]. **Nyström-product** [799].  
**O.D.E.** [393]. **observability** [648].  
**observation** [36]. **obstacle** [365, 532].  
**obstacles** [1352]. **obtain** [1542]. **obtaining** [1296]. **ODE** [492, 1437, 1563]. **ODEs** [282, 644, 1286, 1435, 1436, 1642]. **Oldroyd** [1313]. **One** [1428, 1489, 147, 218, 278, 296, 385, 422, 461, 512, 628, 648, 713, 735, 739, 821, 826, 847, 979, 1081, 1084, 1104, 1154, 1215, 1217, 1269, 1300, 1310, 1351, 1432, 1493].  
**one-dimension** [1493]. **one-dimensional** [278, 296, 385, 461, 648, 713, 735, 979, 1084,

1104, 1154, 1269, 1351, 1432]. **one-leg** [826]. **One-shot** [1489]. **One-step** [1428, 628, 821, 847, 1081]. **only** [1637]. **open** [1628]. **operations** [1289]. **Operator** [235, 1242, 112, 113, 246, 330, 394, 432, 444, 503, 682, 725, 864, 861, 866, 1004, 1186, 1241, 1248, 1477]. **operators** [55, 112, 113, 220, 225, 248, 249, 260, 267, 310, 436, 441, 487, 653, 669, 730, 824, 919, 1000, 1095, 1192, 1226, 1372, 1485, 1490, 1534]. **optical** [854, 853]. **Optimal** [150, 149, 148, 216, 254, 275, 284, 294, 338, 515, 551, 603, 740, 759, 781, 940, 980, 1053, 1113, 1381, 1390, 1473, 1499, 1531, 525, 76, 90, 179, 299, 410, 414, 430, 505, 567, 730, 819, 841, 851, 1051, 1212, 1303, 1366, 1590, 1633]. **optimal-order** [1633]. **Optimality** [186, 51, 52, 731]. **optimization** [50, 51, 52, 77, 245, 269, 373, 468, 496, 507, 643, 805, 1028, 1346, 1413, 1489, 1571, 1603, 1637, 1639]. **Optimized** [560]. **option** [1336, 1574]. **options** [922]. **orbits** [227, 228, 357, 711, 1243, 1429]. **Order** [323, 334, 464, 956, 539, 14, 24, 38, 41, 42, 51, 52, 60, 79, 87, 95, 179, 196, 229, 232, 236, 242, 244, 254, 261, 338, 346, 356, 361, 366, 370, 404, 410, 422, 412, 511, 526, 544, 552, 554, 569, 575, 576, 584, 586, 622, 623, 645, 700, 713, 737, 739, 756, 776, 778, 781, 808, 823, 847, 848, 856, 866, 876, 877, 912, 913, 942, 966, 968, 995, 1009, 1036, 1043, 1044, 1060, 1076, 1087, 1095, 1111, 1116, 1132, 1156, 1163, 1166, 1169, 1203, 1217, 1239, 1260, 1276, 1324, 1338, 1397, 1398, 1431, 1434, 1454, 1465]. **order** [1486, 1498, 1497, 1561, 1609, 1610, 1605, 1620, 1623, 1633, 1634, 1638, 1641, 1650, 1552, 1546]. **orders** [303, 1085, 1440]. **ordinary** [79, 149, 334, 628, 705, 768, 821, 856, 886, 949, 976, 1107, 1115, 1372, 1536, 1598]. **orientation** [655]. **origin** [921]. **Orthogonal** [729, 889, 232, 352, 650, 937, 1314, 1401, 1448, 1585, 1591]. **orthonormal** [534, 533]. **orthonormalization** [1035]. **orthonormalizing** [785]. **oscillating** [958, 959]. **Oscillation** [808, 13, 935, 936, 961, 962]. **oscillators** [959]. **oscillatory** [99, 304, 310, 315, 460, 565, 568, 905, 1292, 1449, 1569, 1617, 1618]. **Oseen** [510, 709, 1194]. **output** [1220, 1389]. **Overcoming** [992, 876]. **overdamped** [1039]. **overdetermined** [478, 1348, 1587]. **Overflow** [686]. **Overlapping** [600, 1144, 1611]. **overrelaxation** [865, 1181].

**P** [156, 884, 1105, 157]. **p.d.e.s** [769, 219]. **packet** [666]. **pairs** [1059, 1072, 1503]. **panel** [428, 1047]. **pantograph** [384, 826, 925]. **paper** [248, 879]. **parabolic** [9, 31, 30, 28, 45, 54, 160, 218, 219, 236, 449, 611, 662, 668, 669, 670, 694, 742, 767, 773, 841, 862, 877, 997, 1000, 999, 1010, 1011, 1016, 1013, 1045, 1043, 1044, 1070, 1140, 1141, 1155, 1207, 1233, 1234, 1235, 1274, 1284, 1311, 1312, 1314, 1371, 1389, 1434, 1442, 1457, 1562, 1593, 1629, 1632, 1633, 1634, 1657, 1552, 1548]. **Parallel** [140, 707, 902, 752, 866, 951, 1442, 1578, 1630]. **Parameter** [717, 1107, 1342, 27, 233, 727, 985, 1334]. **parameter-dependent** [27]. **Parameter-free** [717, 1342]. **parameters** [543, 549]. **Parametric** [117, 743, 134]. **parametrization** [1243]. **parametrized** [382]. **parareal** [1610]. **part** [540, 558, 639, 1097, 1500, 1609, 1648, 528, 112, 113, 187, 298, 421, 660, 1356, 1607]. **Partial** [940, 1, 356, 636, 645, 708, 716, 812, 820, 910, 1021, 1023, 1030, 1053, 1092, 1198, 1311, 1312, 1314, 1379, 1445]. **partially** [207, 835]. **particular** [103]. **partition** [618]. **Partitioning** [1594, 872, 886]. **partitions** [130, 281, 1475]. **patch** [134]. **patches** [677]. **path** [1344]. **Pathwise** [1271]. **PDE** [77, 430, 670, 760, 1155, 1489, 945]. **PDE-constrained** [77, 1489]. **PDEs** [117, 294, 300, 348, 427, 912, 913, 1133, 1178,

1224, 1336, 1593, 1622]. **Peclet** [674]. **penalized** [835]. **penalty** [243, 290, 327, 329, 496, 607, 620, 689, 759, 758, 791, 801, 819, 823, 858, 929, 1027]. **penalty-free** [243]. **pencils** [60]. **Penrose** [1029]. **Penrose-Fife** [1029]. **perfect** [1263, 1264]. **perfectly** [262]. **Performance** [834, 1627]. **period** [644, 1423]. **Periodic** [590, 815, 132, 357, 545, 812, 968, 1243, 1295, 1429, 1489, 1492, 1545, 1546]. **periodic/non** [132]. **periodic/non-periodic** [132]. **Persistence** [821]. **perturbation** [397, 877, 1414, 1487, 1499, 1588, 1631]. **perturbations** [1555]. **perturbed** [45, 58, 110, 327, 385, 408, 601, 679, 1040, 1041, 1056, 1063, 1073, 1117, 1119, 1142, 1158, 1213, 1222, 1227, 1226, 1498, 1497, 1502, 1562, 1565]. **Petrov** [14, 150, 231, 299, 1227, 1252, 1422]. **PH** [676]. **phase** [31, 152, 153, 154, 167, 240, 360, 424, 512, 578, 599, 713, 745, 906, 1020, 1029, 1108, 1170, 1247, 1309, 1310, 1359, 1365]. **phase-field** [1020, 1029]. **phase-function** [1359]. **phenomenon** [1335]. **Picard** [644, 938]. **Piecewise** [342, 809, 1305, 457, 547, 609, 1094, 1118, 1226, 1344, 1504, 761]. **Piecewise-smooth** [1305, 1118]. **piecewise-uniform** [1226]. **PIN** [26]. **Pitaevskii** [608, 750]. **Pitaevskii-type** [608]. **Pivoting** [1321]. **planar** [105, 226, 398, 711, 1160]. **plane** [165, 943, 946, 1007, 1568]. **plane-wave** [943]. **plasma** [164]. **plate** [786, 1352, 1473]. **Plemmons** [1168]. **plotting** [282]. **plus** [181, 631]. **Poincaré** [919, 1319, 1557]. **point** [4, 39, 127, 177, 228, 230, 242, 404, 405, 621, 674, 686, 738, 743, 746, 749, 782, 818, 881, 1099, 1222, 1256, 1376, 1465, 1494, 1498, 1497, 1565, 1612, 1631, 527]. **points** [12, 107, 294, 644, 699, 811, 970, 969, 971, 1064, 1065, 1241, 1353, 1415, 1478, 1481, 1482, 1512, 1633]. **Pointwise** [837, 1041, 1054, 348, 564, 942, 1055, 1573]. **Poisson** [88, 103, 145, 287, 370, 570, 663, 695, 864, 1051, 1069, 1111, 1199, 1239, 1325]. **Poisson-Neumann** [695]. **Poisson-type** [1069]. **Polak** [1645]. **polar** [1239]. **pole** [1069]. **poles** [533]. **pollution** [514, 1095, 1178]. **Pólya** [183]. **Polyak** [1645]. **polygon** [579, 685, 1471]. **polygonal** [671]. **polygons** [642, 1597]. **polyharmonic** [180, 182]. **polyhedral** [83, 246, 863, 1363]. **polymer** [178]. **polymers** [170]. **Polynomial** [306, 938, 1083, 44, 181, 257, 342, 358, 468, 535, 627, 761, 953, 972, 1003, 1046, 1183, 1267, 1285, 1290, 1306, 1329, 1421, 1516, 1595, 1600, 529]. **Polynomials** [889, 44, 312, 313, 352, 800, 937, 1186, 1187, 1308, 1315, 1322, 1414, 1516, 1541]. **polytopes** [281]. **population** [48, 661]. **poroelasticity** [688]. **porous** [207, 289, 360, 748, 749, 1365]. **posed** [466, 1397]. **posedness** [1261]. **positioning** [1168]. **positive** [183, 718, 1355, 1356, 1376, 1438, 1553, 1589]. **positive-definite** [1438]. **positive-definiteness** [183]. **positive-semidefinite** [1376]. **Post** [20]. **Post-processing** [20]. **posteriori** [57, 76, 82, 89, 141, 171, 187, 188, 211, 207, 214, 215, 241, 290, 348, 369, 378, 413, 434, 483, 537, 581, 619, 620, 738, 756, 757, 754, 766, 910, 912, 1012, 1010, 1011, 1029, 1040, 1063, 1151, 1273, 1291, 1295, 1316, 1317, 1371, 1519, 1558, 1653, 524, 608, 1062]. **postprocessing** [83]. **Potential** [1508, 113, 909, 946, 1007, 1278]. **potentials** [122]. **Powell** [516, 557, 1476]. **power** [1265]. **powers** [248, 249]. **Pre** [1607]. **Pre-asymptotic** [1607]. **precision** [1222, 1380]. **Preconditioned** [126, 1556, 123, 255, 581, 838, 1455]. **preconditioner** [343, 417, 712, 1159, 1303, 1376]. **Preconditioners** [1326, 358, 392, 393, 772, 1469, 1529, 522]. **Preconditioning** [919, 1275, 93, 110, 199, 217, 277, 298, 1342, 1343, 1419]. **preconvex**

[1648]. **Predictor**  
 [1544, 1546, 790, 1548, 1547].  
**Predictor-corrector**  
 [1544, 1546, 1548, 1547]. **prescribed**  
 [324, 425, 531]. **presence** [151].  
**Preservation** [192]. **Preserving** [401, 714,  
 97, 282, 513, 541, 624, 676, 675, 765, 1003,  
 1002, 1122, 1120, 1240, 1357, 1635, 1642].  
**pressure** [336, 343, 734, 899, 1113, 1173].  
**pressure-dependent** [899].  
**pressure-robust** [1113]. **pressure-stress**  
 [734]. **pressures** [23, 289]. **pricing**  
 [929, 1336, 1574]. **primal** [238, 1528].  
**primal-dual** [238]. **primitive** [95].  
**primitive-variable** [95]. **principal**  
 [1338, 1576]. **principle** [692, 985].  
**principles** [670]. **priori**  
 [171, 288, 369, 378, 512, 537, 620, 690, 987,  
 1020, 1049, 1212, 1310, 1483, 1565]. **Prize**  
 [61]. **probabilistic** [806, 1233, 1234].  
**problem**  
 [6, 14, 20, 21, 53, 58, 76, 81, 86, 85, 113, 120,  
 125, 144, 146, 164, 189, 201, 205, 210, 208,  
 212, 241, 278, 290, 288, 291, 293, 292, 310,  
 340, 342, 349, 370, 365, 378, 385, 442, 510,  
 512, 518, 567, 570, 578, 583, 584, 608, 632,  
 634, 629, 640, 649, 659, 663, 672, 679, 680,  
 685, 690, 694, 709, 723, 734, 747, 755, 763,  
 773, 777, 837, 838, 860, 869, 891, 900, 991,  
 997, 1040, 1041, 1063, 1084, 1108, 1114, 1116,  
 1119, 1142, 1157, 1154, 1179, 1190, 1194,  
 1206, 1227, 1233, 1234, 1274, 1303, 1304].  
**problem** [1309, 1310, 1327, 1334, 1350, 1354,  
 1362, 1397, 1410, 1489, 1491, 1494, 1499,  
 1501, 1514, 1525, 1537, 1560, 1562, 1573,  
 1567, 1602, 1621]. **problems**  
 [2, 4, 10, 38, 39, 41, 42, 57, 77, 83, 89, 90, 114,  
 127, 126, 132, 138, 140, 168, 173, 196, 197,  
 203, 226, 229, 230, 232, 231, 233, 235, 242,  
 260, 261, 270, 272, 276, 302, 327, 329, 328,  
 337, 353, 354, 355, 367, 382, 386, 391, 404,  
 405, 408, 425, 414, 423, 412, 430, 434, 438,  
 440, 447, 449, 448, 466, 467, 472, 479, 483,  
 487, 523, 532, 549, 569, 599, 601, 613, 614, 621,  
 654, 662, 665, 664, 683, 695, 712, 713, 719, 720,  
 731, 735, 737, 738, 739, 742, 746, 752, 753].  
**problems**  
 [758, 756, 754, 764, 766, 772, 776, 779, 804,  
 808, 818, 836, 841, 866, 874, 877, 881, 902,  
 906, 907, 908, 911, 927, 932, 942, 946, 968,  
 979, 1000, 999, 1006, 1007, 1009, 1017, 1027,  
 1028, 1045, 1043, 1044, 1048, 1049, 1051, 1056,  
 1057, 1070, 1073, 1080, 1087, 1098, 1117, 1124,  
 1143, 1156, 1158, 1170, 1174, 1204, 1211, 1209,  
 1210, 1214, 1215, 1217, 1221, 1226, 1240, 1256,  
 1283, 1294, 1299, 1298, 1341, 1342, 1354, 1359,  
 1376, 1378, 1384, 1389, 1408, 1416, 1428, 1434,  
 1439, 1447, 1457, 1465, 1483, 1498, 1497, 1501,  
 1502, 1503, 1522, 1556, 1559, 1561, 1564].  
**problems** [1565, 1580, 1571, 1597, 1601,  
 1630, 1631, 1632, 1633, 1634, 1651, 501, 522,  
 524, 1551, 1545, 1546]. **procedure**  
 [1347, 1630]. **procedures** [1428]. **Procesi**  
 [455]. **process** [624, 1020, 1351]. **processes**  
 [48, 84, 295, 457, 1038, 1039, 1404, 1507, 550].  
**processing** [20, 1444]. **Product** [12, 438,  
 1530, 351, 408, 432, 677, 799, 1495, 1642].  
**products** [1449]. **profile** [785, 853].  
**programming**  
 [704, 782, 789, 867, 1028, 1247, 1602].  
**progress** [1318]. **Projected**  
 [1429, 50, 234, 516, 1602]. **Projection**  
 [18, 1461, 87, 200, 395, 510, 511, 740, 1194,  
 1219, 1253, 1490]. **projections** [779].  
**projective** [1248]. **Prokhorov** [400].  
**Prolongation** [1089].  
**Prolongation-collocation** [1089]. **proof**  
 [1451]. **proofs** [829, 828]. **propagation**  
 [197, 866, 1163]. **Properties**  
 [430, 1267, 1418, 1655, 1656, 11, 17, 190, 312,  
 331, 334, 384, 460, 492, 506, 520, 669, 702, 714,  
 761, 784, 1174, 1182, 1219, 1336, 1423, 1477,  
 1503, 1520, 1600, 1619, 1620, 1629, 1654].  
**property** [33, 491]. **proportional**  
 [192, 309]. **protein** [49]. **Prüfer** [233].  
**pseudo** [666, 1042]. **pseudo-inverses**  
 [1042]. **pseudo-spectral** [666]. **pseudorank**  
 [114]. **Pseudospectra** [1604, 325].



**Pseudospectral** [1166, 703, 721, 928, 1131, 1150, 1331, 1209, 1210, 1218]. **pseudostress** [340, 378, 1206]. **pseudostress-based** [378]. **Pták's** [1110]. **punch** [158]. **Pure** [47]. **pyramids** [1276]. **Pythagorean** [675, 677]. **Pythagorean-hodograph** [675, 677].

**Q** [1495]. **QP** [698]. **QR** [783]. **quadrant** [458]. **Quadratic** [115, 322, 1490, 1633, 268, 290, 480, 542, 543, 541, 782, 789, 809, 833, 893, 930, 1022, 1028, 1247, 1393, 1468, 1632]. **Quadrature** [352, 642, 1407, 99, 129, 231, 324, 399, 558, 845, 958, 959, 1034, 1079, 1128, 1189, 1203, 1230, 1274, 1293, 1320, 1349, 1366, 1442, 1480, 1500, 1524, 1532, 1534, 1550, 1599, 525, 1479]. **Quadratures** [1231, 1138, 1232]. **quadrilateral** [415, 1632, 1633, 1634]. **Qualitative** [784, 11, 669]. **qualocation** [578, 1311]. **quantification** [977]. **quantiles** [1297]. **quantum** [92]. **quartic** [590]. **Quasi** [1212, 1236, 1648, 75, 169, 215, 220, 236, 319, 362, 415, 467, 505, 731, 781, 826, 912, 1235, 1295, 1349, 1475, 1042, 1602, 1647]. **quasi-** [75]. **quasi-continuum** [1295]. **quasi-definite** [1349]. **quasi-geometric** [826]. **quasi-interpolation** [319, 1475]. **quasi-linear** [912, 1235]. **quasi-Magnus** [236]. **quasi-Monte** [781]. **Quasi-Newton** [1648, 1042, 1602, 1647]. **quasi-Newtonian** [215, 467]. **Quasi-optimal** [1212, 505]. **quasi-optimality** [731]. **quasi-square** [362]. **Quasi-symplectic** [1236]. **quasi-uniform** [220]. **quasi-variational** [169]. **quasi-Wilson** [415]. **quasicontinuum** [564]. **quasiconvex** [1]. **quasilinear** [229, 467, 862, 911, 1310, 1565]. **quasimatrix** [1533]. **quasinonlocal** [1106]. **Quasioptimal** [375]. **queueing** [683]. **quintic** [184, 676, 675, 1316].

**R** [326, 508]. **R-algorithm** [326]. **R-linear** [508]. **radar** [262]. **radial** [180, 321, 427, 702, 703, 722, 966, 1085, 1146, 1333, 1424, 1453, 1614]. **radiation** [197]. **radiative** [708, 799]. **radii** [830]. **radiosity** [105, 863]. **radius** [868, 1218]. **Random** [616, 194, 888, 977]. **Randomized** [553, 753, 1554]. **range** [888, 1106, 1346, 1449]. **range-dependent** [888]. **rank** [117, 194, 441, 572, 1300, 1553, 1588, 1656]. **rank-deficient** [194]. **rank-one** [1300]. **rank-revealing** [572]. **rapid** [13, 935, 936, 961, 962, 1170, 1441]. **Rate** [730, 1415, 43, 119, 899, 1271]. **rates** [179, 239, 269, 297, 602, 741, 806, 1052, 1432, 1522, 1575, 1592]. **Rational** [324, 793, 931, 987, 1450, 256, 462, 463, 534, 533, 542, 543, 541, 763, 807, 809, 841, 952, 1208, 1320, 1550, 1586]. **rationals** [40]. **Raviart** [569, 1051, 1113]. **Rayleigh** [1424]. **reaction** [14, 84, 385, 449, 483, 714, 812, 1032, 1040, 1041, 1063, 1117, 1119, 1127, 1154, 1158, 1213, 1405, 1423, 1611, 1497]. **reaction-diffusion** [14, 84, 449, 1127, 1158, 1213, 1405, 1423, 1611]. **Reaction-diffusion-type** [1497]. **real** [199, 395, 521, 830, 1178, 1184, 1188, 1189, 1532, 1543]. **real-valued** [199]. **Realistic** [537, 1582]. **reconstruction** [914, 1093]. **reconstructions** [1371]. **recovery** [149, 148, 483, 1070, 1094, 1381, 1473, 1608, 1649, 148]. **Rectangular** [580, 362, 706, 1124, 1495, 1604, 1625]. **rectangularly** [1325]. **rectilinear** [518]. **Recurrence** [534, 1459]. **recursive** [805, 1219]. **recursive-trust-region** [805]. **redistancing** [651]. **Reduced** [766, 1389, 22, 314, 399, 727, 1545]. **Reduced-basis** [1389]. **reducible** [1599]. **reduction** [41, 42, 876, 920, 1147]. **Redundancy** [1474]. **Reeves** [33, 506]. **Referees** [63, 65, 67, 70, 72, 74]. **reference** [695]. **Refinable** [317]. **refined** [24, 671, 673, 844]. **refinement** [890, 1205]. **reflection** [777]. **reformulation** [122]. **regime** [549, 1496]. **region**

[49, 128, 790, 805, 806, 816, 1346, 1523, 1637].  
**regions**  
 [627, 827, 1021, 1160, 1325, 1544, 131].  
**regression** [468, 481, 1297, 1591]. **regular**  
 [56, 181, 291, 344, 793]. **regularity**  
 [75, 120, 141, 1133, 502]. **regularization**  
 [373, 631, 1024, 1605]. **regularized**  
 [173, 190, 239, 260, 656]. **regularly**  
 [248, 249]. **reiterated** [1337]. **related**  
 [12, 1020, 1023, 1235, 1386, 1488]. **relation**  
 [280]. **relationship** [48]. **relative**  
 [604, 766, 1095]. **relaxation** [125, 1611].  
**reliability** [456, 1018]. **Remarks** [1367].  
**remeshing** [1360]. **removal** [853].  
**removing** [1576]. **reordering** [815, 888].  
**Repeated** [562]. **Representation**  
 [775, 441, 549, 859]. **reproducing** [1385].  
**reproduction** [1595]. **REQP** [176].  
**reservoir** [343, 381]. **Residual**  
 [188, 241, 434, 426, 706, 908, 1277, 1317].  
**Residual-based** [241, 434, 1317]. **residuals**  
 [86]. **residue** [1547]. **resistivity** [1036].  
**resolution** [108]. **resolvent** [1542].  
**restarted** [941, 1208]. **restricted**  
 [447, 1042, 1439]. **Restrictively** [123].  
**result** [718, 732, 1609]. **results**  
 [8, 147, 366, 370, 395, 1322, 1350, 1404, 1542].  
**Retarded** [1411, 1047]. **revealing** [572].  
**revelations** [1539]. **reverse** [437].  
**reversible** [357]. **revisited** [442]. **Ribière**  
 [1645]. **Riccati**  
 [834, 988, 987, 1104, 1112, 1452].  
**Riccati-type** [988]. **Ricci** [715]. **Riemann**  
 [439, 1221, 1323, 1525, 1534].  
**Riemann-problem-based** [1525].  
**Riemannian**  
 [15, 128, 536, 693, 816, 871, 939, 1099, 1553].  
**right** [1499, 1518]. **right-hand** [1499].  
**right-hand-side** [1518]. **rightmost** [1211].  
**rigid** [158, 663, 1352]. **Ritz** [1371, 1424].  
**RK** [1388]. **RLW** [832]. **Robbins** [1327].  
**Robin** [163, 986]. **Robust**  
 [325, 328, 413, 1109, 1213, 1410, 1469, 1519,  
 550, 12, 385, 651, 1001, 1083, 1113, 1214,  
 1238, 1365, 1378, 1562, 1653]. **rod** [882].  
**role** [277]. **Ronald** [814]. **root**  
 [517, 1081, 529]. **root-finding** [1081, 529].  
**roots** [286, 1162]. **Rosenbrock** [1005].  
**rotating** [663, 873]. **rotation** [566, 1136].  
**Rothe** [1000]. **Rothe-Galerkin** [1000].  
**rough** [303, 1592]. **rounding** [1636]. **rules**  
 [12, 284, 568, 1097, 1148, 1175, 1189, 1230,  
 1500, 1524, 1566, 1599]. **Runge**  
 [131, 191, 323, 333, 345, 346, 350, 376, 474,  
 470, 471, 472, 473, 573, 577, 574, 575, 576,  
 611, 813, 855, 887, 917, 924, 951, 1059, 1121,  
 1182, 1280, 1302, 1404, 1417, 1429, 1440, 1454,  
 1481, 1482, 1561, 1594, 1643, 944, 1549, 1543].  
**Sabin** [516, 557, 1476]. **saddle**  
 [127, 738, 746, 749, 1376, 1631, 527].  
**saddle-point** [127]. **safeguarded** [1277].  
**Sakaguchi** [5]. **sample** [468]. **sampling**  
 [59, 98, 1507]. **Sandpiles** [169]. **saturated**  
 [207]. **saturation** [956]. **scalar**  
 [851, 911, 1427, 1443, 1641]. **scale**  
 [121, 644, 789, 1103, 1119, 1209, 1210, 1452].  
**scaleable** [1238]. **scaled** [274]. **scales**  
 [2, 1213]. **scaling** [1390, 1590]. **scattered**  
 [516, 1614]. **scattering** [225, 260, 398, 613,  
 663, 727, 885, 977, 1025, 1026, 1082]. **scheme**  
 [16, 116, 143, 147, 172, 174, 175, 200, 224, 287,  
 360, 388, 387, 408, 424, 433, 446, 449, 448,  
 456, 474, 486, 585, 654, 656, 765, 774, 831,  
 837, 866, 870, 904, 982, 995, 998, 999, 1010,  
 1016, 1029, 1037, 1071, 1074, 1096, 1116,  
 1122, 1133, 1152, 1156, 1262, 1352, 1365,  
 1375, 1388, 1409, 1423, 1466, 1615, 1635].  
**Schemes**  
 [583, 9, 29, 84, 95, 223, 246, 273, 314, 381, 386,  
 389, 430, 455, 565, 571, 585, 597, 652, 655,  
 679, 691, 694, 713, 792, 851, 855, 877, 914,  
 973, 996, 1036, 1132, 1207, 1239, 1245, 1246,  
 1364, 1374, 1387, 1406, 1427, 1438, 1443, 1502,  
 1517, 1525, 1526, 1592, 1619, 1620, 1641].  
**Schmidt** [771]. **Scholes**  
 [382, 1001, 1574, 945]. **Schrödinger**  
 [3, 32, 122, 411, 549, 604, 751, 1068, 1084,

1122, 1120, 1146, 1149, 1406, 1424, 1453, 1454, 1531]. **Schur** [772, 803]. **Schwarz** [96, 118, 273, 560, 884, 1009, 1419, 1511, 1611, 1624]. **Schwarz-Neumann** [118]. **screens** [221, 885]. **SDEs** [646, 1071]. **search** [33, 426, 497, 791, 939, 1622]. **search-extension** [1622]. **Second** [913, 51, 52, 60, 95, 104, 107, 191, 229, 232, 356, 361, 554, 569, 645, 737, 776, 787, 790, 798, 856, 912, 923, 942, 968, 989, 995, 1009, 1095, 1156, 1188, 1260, 1320, 1464, 1465, 1609, 1610, 1623, 1649, 1513, 1549, 1546]. **second-derivative** [790]. **second-kind** [1188, 1513, 1549]. **Second-order** [913, 51, 52, 60, 95, 229, 232, 356, 361, 554, 569, 645, 737, 776, 856, 912, 968, 995, 1009, 1095, 1156, 1260, 1465, 1609, 1610, 1623, 1546]. **second-order-accurate** [942]. **section** [262]. **sectorial** [538, 895]. **Segel** [224, 1395]. **segment** [134]. **Segrè** [1554]. **Seidel** [901]. **selection** [535, 855, 1299, 1601]. **self** [175, 267, 599, 1095, 1178, 1490]. **self-adaptive** [599]. **self-adjoint** [267, 1095, 1490]. **self-avoiding** [175]. **Semi** [314, 3, 39, 216, 441, 446, 870, 979, 1096, 200]. **Semi-discrete** [314, 979, 1096]. **semi-discretizations** [3]. **semi-implicit** [216, 446, 870]. **semi-infinite** [441]. **semi-Lagrangian** [200]. **semi-linear** [39]. **semiaxis** [521, 1188, 1189]. **semiclassical** [549, 1068]. **semidefinite** [436, 704, 1376, 1553]. **Semidiscrete** [1313, 146, 981, 1434]. **semidiscretization** [734]. **semidiscretized** [955]. **semilinear** [31, 45, 385, 578, 1040, 1041, 1248, 1260, 1622]. **separable** [804, 867]. **separation** [152, 153, 154, 240]. **sequence** [1296]. **sequences** [338, 553]. **Sequential** [1413, 51, 52, 1247]. **series** [13, 59, 339, 626, 775, 850, 1184, 1185, 1265, 1266, 1325, 1467, 1535, 504]. **Set** [894, 238, 651, 656, 771, 1030, 1093, 1553]. **set-valued** [1030, 1093]. **sets** [234, 374, 468, 1281, 1429]. **setting** [383].

**Several** [1503, 1132, 1524]. **severe** [686]. **shallow** [80, 202]. **Shanno** [1347]. **Shanno-Toint** [1347]. **Shape** [282, 541, 676, 675, 1002, 1357, 97, 513, 1635]. **Shape-preserving** [282, 676, 675, 1002, 97, 513]. **shaped** [1142]. **Sharp** [372]. **Shaw** [634]. **shear** [899]. **shear-rate-** [899]. **shell** [211, 1153]. **Shepard** [544]. **shifted** [107]. **shifts** [785, 921]. **Shishkin** [837, 1114, 1124, 1143, 1387]. **shock** [777]. **shock-reflection** [777]. **shooting** [907, 1359]. **Shor** [326]. **Short** [828]. **shortening** [633]. **shot** [1489]. **shrinking** [531]. **side** [1518]. **sided** [215]. **sides** [1499]. **Siewert** [46]. **significance** [686]. **significant** [1538]. **Signorini** [719, 1341, 1567]. **Signorni** [1483]. **Signorni-type** [1483]. **Sigurdsson** [1402]. **similarity** [777, 1388]. **simple** [22, 172, 174, 175, 599, 791, 1459]. **simplex** [497]. **simplicial** [281]. **simplified** [499, 1395]. **simulation** [343]. **simulations** [193, 1352]. **simultaneous** [1162, 1412, 1506]. **Sinc** [230, 1146, 1507, 1145, 1268]. **Sinc-collocation** [230, 1146]. **sinc-Galerkin** [1145, 1268]. **sinc-Gauss** [1507]. **Single** [206, 512, 578, 1108, 1309, 1310]. **Single-grid** [206]. **single-phase** [512, 1108, 1309, 1310]. **singly** [331]. **singly-implicit** [331]. **singular** [4, 220, 237, 270, 306, 396, 405, 485, 490, 559, 581, 621, 682, 720, 810, 877, 923, 974, 1064, 1065, 1079, 1175, 1193, 1260, 1480, 1479, 1484, 1509, 1513]. **singularities** [874, 876, 918, 1143, 1338]. **singularity** [1390]. **singularly** [45, 58, 327, 385, 408, 601, 679, 1040, 1041, 1056, 1063, 1073, 1117, 1119, 1142, 1158, 1213, 1227, 1226, 1498, 1497, 1502, 1562, 1565]. **SIP** [1167, 522]. **SIP-DG** [522]. **Sivashinsky** [29, 1131]. **sixth**

[584, 823, 968]. **sixth-order** [584, 823, 968]. **size** [177, 535]. **skew** [127, 848, 960]. **skew-Hermitian** [127]. **skew-symmetric** [848, 960]. **slice** [1225]. **slice-based** [1225]. **Sloan** [797]. **Slobodeckij** [660]. **slow** [1420]. **slowly** [1266]. **Smale** [418, 1099]. **small** [256, 647, 1321]. **smallest** [1588]. **Smolyak** [553]. **smooth** [106, 161, 943, 994, 1118, 1302, 1305, 1504, 1652]. **Smoothed** [429]. **Smoothing** [1629, 414, 489, 547, 901, 1547]. **Smoothness** [817, 1619, 284, 561, 781, 1240, 1245, 1474]. **snapshot** [1456]. **Sneyd** [1615]. **Sobolev** [93, 173, 318, 515, 781, 825, 1085]. **Sobolev-type** [1085]. **software** [492]. **solenoidal** [1303]. **solid** [85, 690, 916]. **Solidification** [167, 1020]. **Solution** [350, 362, 889, 999, 1104, 57, 58, 94, 101, 106, 105, 203, 261, 278, 277, 304, 305, 329, 344, 396, 395, 398, 416, 414, 478, 479, 490, 499, 504, 519, 559, 572, 579, 628, 663, 695, 705, 763, 777, 808, 838, 857, 864, 902, 942, 946, 997, 1000, 1007, 1008, 1046, 1066, 1080, 1084, 1115, 1123, 1129, 1127, 1164, 1165, 1203, 1233, 1234, 1286, 1327, 1330, 1368, 1373, 1406, 1411, 1416, 1424, 1422, 1452, 1453, 1454, 1473, 1480, 1479, 1489, 1514, 1536, 1560, 1577, 1587, 1654, 1513, 1551]. **solution-dependent** [304]. **solutions** [56, 103, 108, 121, 143, 208, 282, 311, 342, 341, 394, 455, 471, 545, 604, 652, 768, 778, 813, 822, 878, 879, 898, 932, 954, 979, 988, 1007, 1200, 1244, 1257, 1271, 1325, 1341, 1348, 1388, 1399, 1423, 1492, 1564, 1622, 1655]. **solvability** [728]. **solve** [423, 535, 967, 1239]. **solver** [439, 730, 942, 1627]. **solvers** [595, 1563]. **Solving** [202, 440, 640, 1256, 1437, 1445, 159, 273, 432, 446, 518, 683, 708, 764, 788, 832, 866, 907, 972, 1001, 1028, 1092, 1112, 1190, 1226, 1567]. **Some** [77, 130, 147, 395, 1188, 1219, 1412, 1453, 1502, 22, 223, 312, 491, 571, 625, 713, 966, 1059, 1187, 1610]. **SOR** [1091, 1102]. **SOR-like** [1102]. **Soulie** [21]. **source** [95, 389, 902, 914, 1427, 1443]. **Space** [18, 9, 45, 54, 97, 173, 207, 216, 218, 299, 335, 422, 475, 512, 653, 665, 664, 692, 742, 779, 1049, 1132, 1217, 1310, 1523, 1577, 522]. **Space-Time** [18, 45, 1049]. **spaced** [1316]. **spaces** [318, 317, 515, 723, 781, 825, 836, 853, 1085, 1248, 1307, 1385, 1508, 1521]. **spanning** [1383]. **Sparse** [845, 54, 117, 362, 408, 417, 429, 591, 596, 595, 594, 810, 977, 1047, 1119, 1211, 1347, 1374, 1401, 1522, 1521, 1606]. **Spatial** [1198, 179, 244, 675, 1258]. **spatially** [701]. **SPD** [589]. **SPDEs** [287, 1134, 1575]. **special** [650, 718, 1448, 1543]. **specified** [482, 1048]. **spectra** [1095]. **Spectral** [5, 50, 213, 225, 300, 514, 888, 923, 1082, 1095, 4, 90, 112, 113, 132, 206, 209, 234, 266, 298, 310, 358, 426, 520, 580, 666, 720, 832, 1008, 1025, 1068, 1069, 1153, 1178, 1326, 1343, 1471, 1504, 1581]. **spectral/** [358]. **spectral/difference** [1069]. **spectrum** [1171, 1178, 1490]. **speed** [326]. **sphere** [183, 699, 1067, 1159, 1411]. **spherical** [82, 1069, 1153]. **spine** [15]. **spiral** [469]. **Spline** [374, 859, 1422, 232, 306, 479, 481, 513, 542, 556, 675, 700, 780, 786, 992, 1001, 1180, 1255, 1256, 1314, 1357, 1465, 1468, 1502, 1535]. **spline-fitting** [479]. **splines** [180, 182, 184, 292, 303, 317, 322, 469, 516, 557, 590, 676, 871, 920, 1003, 1022, 1125, 1147, 1169, 1267, 1279, 1316, 1353, 1393, 1473, 1475, 1474, 1476]. **split** [401, 551, 750]. **split-step** [750]. **split-steps** [551]. **splitting** [42, 127, 235, 265, 315, 432, 526, 549, 597, 668, 691, 831, 862, 867, 876, 1004, 1016, 1014, 1033, 1068, 1122, 1364, 1376, 1445, 1446, 1642]. **splittings** [861, 528]. **splittings-convergence** [861]. **spreading** [151]. **Spurious** [612, 932, 813, 954, 1257, 1423, 1492]. **SQP** [770, 790]. **square** [362, 377, 411, 561]. **Squared** [566]. **squares** [114, 190, 280, 391, 447, 478, 481, 482, 493, 547, 548, 697, 1125, 1168, 1190, 1228, 1237,

1299, 1298, 1416, 1425, 1486, 1499, 1595].  
**squaring** [277]. **Stability**  
 [28, 54, 84, 94, 109, 132, 133, 191, 237, 344,  
 418, 472, 554, 568, 588, 1377, 706, 826, 856,  
 917, 925, 955, 949, 965, 1127, 1130, 1174,  
 1182, 1423, 1460, 1527, 1627, 1643, 944, 945,  
 107, 129, 131, 253, 271, 293, 292, 325, 331,  
 332, 333, 384, 395, 465, 470, 473, 477, 500,  
 551, 641, 718, 732, 740, 769, 827, 829, 828,  
 830, 863, 873, 892, 896, 914, 998, 1021, 1032,  
 1071, 1083, 1105, 1123, 1135, 1137, 1138,  
 1155, 1154, 1265, 1364, 1524, 1542, 1563,  
 1596, 1623, 529, 1549, 1543, 1544, 1548, 1547].  
**Stabilization**  
 [18, 217, 510, 654, 824, 1100, 1124, 1194].  
**stabilized** [9, 86, 146, 329, 589, 709, 770,  
 860, 869, 1054, 1109, 1287, 1447, 1459, 1519].  
**Stable**  
 [167, 168, 389, 571, 812, 1136, 23, 406, 407,  
 471, 782, 848, 857, 968, 973, 1016, 1072, 1096,  
 1156, 1190, 1194, 1244, 1459, 1561, 1641, 527].  
**stage** [1207, 1440]. **staggered** [444].  
**Standard** [108, 119, 280, 1151]. **starlike**  
 [1315]. **stars** [956, 1557]. **starting** [346].  
**state** [100, 414, 635, 640]. **state/Hopf**  
 [1612]. **states** [667]. **static** [85]. **stationary**  
 [94, 567, 619, 673, 714, 986, 1081, 1244].  
**Steady** [1612, 100, 147, 640, 979].  
**Steady-state** [1612, 100, 640].  
**Steady-state/Hopf** [1612]. **steepest**  
 [494, 495, 503, 520]. **Stefan**  
 [278, 425, 512, 578, 632, 629, 906, 1098, 1170,  
 1309, 1310, 1491, 1564]. **Steklov**  
 [53, 731, 919, 1621]. **stencils** [515]. **step**  
 [141, 177, 323, 346, 464, 535, 628, 745, 750,  
 790, 821, 847, 1010, 1011, 1081, 1428, 1453].  
**step-size** [535]. **steplength** [762, 1369].  
**stepping** [1019, 1128, 1258, 1259, 1469].  
**steps** [551, 1629]. **stepsize** [338, 855]. **stiff**  
 [376, 492, 595, 886, 908, 933, 1286, 1551].  
**Stochastic** [259, 1134, 135, 250, 252, 316,  
 361, 400, 402, 411, 461, 640, 788, 922, 1014,  
 1019, 1053, 1105, 1122, 1133, 1173, 1235,  
 1246, 1269, 1271, 1343, 1522, 602].  
**stochastically** [48]. **Stokes**  
 [684, 831, 1109, 7, 18, 21, 81, 86, 87, 111, 121,  
 120, 141, 142, 179, 188, 210, 206, 209, 208,  
 212, 214, 246, 288, 291, 293, 292, 336, 340,  
 349, 378, 419, 453, 560, 583, 589, 615, 649,  
 673, 726, 842, 869, 897, 990, 998, 1012, 1015,  
 1051, 1083, 1113, 1172, 1179, 1206, 1212,  
 1272, 1303, 1363, 1397, 1425, 1470, 1560].  
**Stopping** [1222, 252, 1566, 1551]. **story**  
 [1252]. **straightening** [1344]. **Strang** [393].  
**Strang-type** [393]. **strategies**  
 [914, 1019, 1038, 1321, 1594]. **strategy**  
 [1147, 1208]. **stream** [209].  
**stream-function** [209]. **streamline**  
 [837, 1495]. **streamline-diffusion** [1495].  
**stress** [364, 734]. **stresses** [452]. **stretched**  
 [1109]. **strict** [183, 283]. **string** [1344]. **strip**  
 [1224]. **strip-based** [1224]. **Strong**  
 [190, 1179, 1575]. **strongly**  
 [467, 485, 795, 999, 1077, 1129]. **structural**  
 [201, 732, 733]. **structurally** [1190].  
**Structure** [1129, 478, 555, 691, 734, 915,  
 1167, 1392, 1583, 1635].  
**structure-preserving** [1635]. **structured**  
 [572, 1554]. **studies** [195]. **Study** [656, 680].  
**Sturm**  
 [196, 233, 270, 659, 720, 763, 808, 907, 1359].  
**Sub** [292, 1258]. **sub-diffusion** [1258].  
**Sub-Grid** [292]. **subcycling** [597].  
**subdiffusion** [982, 983, 1006]. **subdivision**  
 [546, 817, 1245, 1386, 1619, 1620]. **Subgrid**  
 [824, 121]. **subgrid-scale** [121]. **subject**  
 [519, 1647]. **submatrix** [1588]. **subsampling**  
 [245]. **subsequent** [783]. **subsonic** [1496].  
**subspace** [681, 969]. **subspace-breaking**  
 [969]. **substructuring** [1224, 1225].  
**subtraction** [686]. **successive**  
 [624, 865, 1181]. **Sufficient** [679]. **sum** [548].  
**sums** [279, 1021, 1589]. **sup**  
 [292, 1072, 1194]. **super** [585].  
**super-convergence** [585]. **Supercloseness**  
 [1124, 1142]. **superconducting** [638, 1493].  
**superconductivity** [296, 630, 635].  
**superconductors** [169].

**Superconvergence** [605, 835, 1061, 1111, 1217, 1372, 192, 281, 308, 1143, 1420, 1477, 1500, 1609].  
**Superconvergent** [1094, 1649, 453, 452, 717, 1363].  
**superlinear** [1348]. **superposition** [49].  
**supersmoothness** [1474]. **supported** [427].  
**Supraconvergence** [143].  
**supraconvergent** [735]. **surface** [134, 303, 556, 557, 619, 636, 677, 780, 992, 1043, 1379].  
**surface-fitting** [556]. **surfaces** [106, 220, 348, 530, 586, 610, 611, 714, 854, 853, 860, 977, 1043, 1044, 1141, 1287].  
**surfactant** [151]. **survey** [1322, 1434].  
**Sushi** [654]. **SVD** [581]. **SWIFT** [402].  
**switching** [39]. **Symm** [642, 1092, 1628].  
**symmetric** [185, 371, 440, 450, 454, 452, 594, 1377, 689, 848, 941, 960, 968, 987, 993, 1112, 1160, 1201, 1211, 1216, 1268, 1282, 1300, 1318, 1347, 1396, 1444, 1507, 1508].  
**Symmetrization** [1145, 150]. **symmetry** [39, 545, 970, 1242, 1612].  
**symmetry-breaking** [1242, 1612].  
**Symplectic** [565, 122, 346, 411, 1121, 1236, 1280].  
**symplecticity** [850]. **system** [14, 31, 155, 188, 296, 336, 363, 450, 484, 582, 684, 820, 883, 990, 1029, 1117, 1129, 1158, 1272, 1395, 1486, 1496, 1587, 1635]. **Systems** [889, 35, 94, 123, 126, 185, 199, 227, 238, 304, 350, 357, 356, 362, 376, 392, 393, 401, 403, 460, 492, 498, 521, 545, 555, 565, 572, 622, 623, 644, 670, 710, 711, 714, 788, 794, 803, 849, 872, 890, 896, 917, 924, 967, 972, 1019, 1065, 1102, 1115, 1167, 1176, 1177, 1193, 1213, 1216, 1268, 1284, 1301, 1321, 1343, 1392, 1412, 1536, 1555, 1579, 1627, 944].  
**Szego** [1320, 525].  
**Takens** [228, 970, 969, 1612]. **taut** [1344].  
**Taylor** [292, 1185, 1444]. **technical** [820].  
**technique** [293, 302, 1171, 1374].  
**techniques** [138, 546, 597, 766, 1145].  
**temporal** [998]. **Tensor** [677, 408, 977, 1495, 1642]. **Tensor-product** [677, 1495, 1642]. **term** [250]. **terms** [389, 760, 902, 1427, 1443, 501]. **test** [299, 491, 908, 1439, 1537]. **Testing** [1455, 442, 1554]. **tetrahedral** [1062, 1419, 1475]. **textile** [820]. **texture** [631]. **th** [1105]. **their** [91, 395, 492, 669, 918, 1148, 1232, 1251, 1470, 1500, 1570, 1606].  
**theorem** [91, 956, 1352]. **theorems** [733, 1307, 1571]. **theoretic** [1508]. **Theory** [283, 435, 536, 616, 744, 808, 909, 951, 1099, 1112, 1463, 1563]. **There** [564].  
**thermoelastic** [916]. **thin** [22, 151, 786, 1433, 1473]. **third** [37, 422, 1650]. **third-kind** [37].  
**third-order** [422, 1650]. **Thomas** [34, 569].  
**three** [87, 182, 649, 831, 842, 870, 973, 1172, 1225, 1370, 1440, 1439, 1529]. **three-body** [1439]. **three-dimensional** [831, 870, 1370].  
**three-dimensions** [87]. **three-fields** [1172].  
**three-stage** [1440]. **three-time-level** [973].  
**Time** [18, 137, 146, 736, 802, 1202, 6, 45, 54, 95, 141, 210, 207, 214, 216, 448, 475, 500, 523, 526, 597, 602, 611, 632, 662, 665, 664, 708, 713, 734, 742, 747, 751, 831, 845, 866, 869, 871, 877, 883, 896, 916, 954, 973, 979, 980, 981, 1004, 1012, 1019, 1029, 1033, 1041, 1044, 1049, 1057, 1068, 1074, 1128, 1140, 1141, 1149, 1153, 1217, 1258, 1259, 1375, 1376, 1391, 1405, 1442, 1466, 1469, 1489, 1531, 1572, 1611, 1629].  
**time-accuracy** [877]. **Time-dependent** [146, 6, 141, 210, 214, 448, 523, 869, 916, 1012, 1033, 1041, 1149, 1217, 1489, 1572].  
**time-discrete** [1531]. **time-discretization** [602]. **Time-domain** [137, 734, 1074].  
**time-evolution** [866]. **time-fractional** [981]. **time-harmonic** [1153, 1376].  
**time-parallel** [866]. **time-periodic** [1489].  
**time-space** [475, 742]. **time-splitting** [526, 1068]. **time-stepping** [1019, 1258, 1259, 1469]. **time-subcycling** [597]. **time-varying** [896]. **Timoshenko** [882]. **Toda** [347]. **Toeplitz** [392, 396, 795].

**Toint** [1347]. **tolerance** [887]. **tomography** [984, 1339]. **topology** [1383]. **torsion** [205]. **Total** [160, 162, 851, 173, 263, 264, 1317]. **touching** [486]. **TPFA** [585]. **Trace** [1483, 1379]. **Tracking** [1318, 1098]. **trajectory** [472, 1204]. **transfer** [723, 799]. **transform** [477, 852, 1385, 1459, 1507]. **transformation** [233, 1203, 1266, 1358, 1442, 1450, 1652]. **transformations** [115, 301, 1211, 1296]. **transforms** [59, 99, 352, 958, 1202, 1617, 1618]. **transient** [203, 387, 915, 1470]. **transition** [713]. **transmission** [261, 337, 874, 997]. **transport** [16, 272, 433, 708, 744, 1104, 1112, 1161]. **Transportation** [940]. **trapezoidal** [551, 1175, 1401]. **treatment** [708, 1047, 1549]. **tree** [1065]. **tree-based** [1065]. **Trees** [339, 1383]. **Trefftz** [1049]. **trial** [8]. **triangle** [936]. **triangular** [115, 544, 1227, 1419, 1488]. **triangularization** [1533]. **triangulation** [1393]. **triangulations** [609]. **trick** [633]. **tridiagonal** [498]. **Trigonometric** [883, 1221, 107, 315]. **Trivariate** [257]. **Trotter** [549]. **Truncated** [804]. **Truncation** [1176, 1105, 1545]. **Trust** [49, 128, 790, 805, 806, 816, 1346, 1523, 1637]. **Trust-region** [49, 128, 806, 1523]. **trust-region-free** [790]. **tuned** [712]. **Turán** [1232]. **turbulent** [1370]. **turning** [1241, 1478]. **TV** [631]. **TVD** [1526]. **TVNE** [1650]. **Two** [177, 215, 353, 1009, 1207, 1440, 1511, 4, 9, 31, 87, 98, 115, 126, 141, 142, 180, 230, 233, 242, 261, 273, 305, 360, 404, 405, 417, 412, 464, 513, 621, 639, 660, 664, 720, 724, 818, 881, 885, 906, 1006, 1096, 1100, 1119, 1150, 1152, 1156, 1158, 1162, 1170, 1197, 1224, 1256, 1303, 1334, 1344, 1365, 1370, 1423, 1452, 1465, 1494, 1498, 1497, 1531, 1565, 1615, 1624]. **two-** [87]. **two-by-two** [126]. **two-dimensional** [98, 180, 261, 273, 305, 660, 664, 885, 1006, 1096, 1150, 1156, 1197, 1303, 1615]. **two-factor** [1152]. **Two-grid** [353]. **Two-level** [1009, 1511, 417, 1207, 1624]. **two-parameter** [233, 1334]. **two-phase** [31, 360, 906, 1170, 1365]. **Two-point** [177, 4, 230, 242, 404, 405, 621, 818, 881, 1256, 1465, 1494, 1498, 1497, 1565]. **two-scale** [1119]. **Two-sided** [215]. **Two-stage** [1207, 1440]. **two-step** [141, 464]. **twofold** [738, 746, 749]. **type** [29, 82, 236, 393, 443, 533, 595, 608, 635, 709, 710, 728, 786, 796, 801, 906, 937, 1029, 1061, 1069, 1085, 1121, 1132, 1173, 1177, 1194, 1197, 1236, 1293, 1402, 1455, 1475, 1483, 1491, 1529, 1569, 1594, 1617, 1618, 1621, 1623, 1649, 527, 91, 490, 559, 563, 793, 856, 988, 1229, 1431, 1480, 1479, 1498, 1497]. **type-6** [1475]. **type-II** [635]. **Unbiased** [1067]. **unbounded** [971, 1331]. **uncertain** [1152, 1336]. **uncertainty** [36, 482, 977]. **Unconditional** [870]. **unconditionally** [136, 1016, 1152, 1156]. **unconstrained** [90, 507, 1346, 1520, 1639]. **underdetermined** [468]. **underflow** [686]. **understanding** [253]. **unfitted** [159, 161, 328, 570, 1087, 1457]. **unidimensional** [578, 1108, 1309]. **Unified** [954, 1634, 370, 563, 1042, 1525, 501]. **Uniform** [394, 490, 500, 1031, 1157, 1259, 1328, 1468, 1572, 1623, 1640, 220, 281, 395, 648, 679, 877, 1056, 1226, 1405, 1420]. **Uniformly** [1650, 1, 23, 418, 448, 1158, 1502]. **unilateral** [187, 1511]. **uniqueness** [1577]. **unit** [324, 864, 1329]. **unitary** [931]. **unity** [618]. **Univariate** [181, 319, 547, 548]. **unknown** [1413]. **unsteady** [1354]. **unstructured** [653]. **unsymmetric** [417]. **updates** [1042, 1396, 1647, 1648]. **Updating** [1401, 1300, 1347]. **upper** [1401]. **Upwind** [1013, 16, 57, 272, 314, 379, 389, 928, 1116, 1157, 1226, 1387, 1395]. **upwind-**

- [1226]. **upwinding** [1527]. **Use** [1060, 114, 864, 1042, 1356, 1459]. **user** [1449]. **user-friendly** [1449]. **Using** [497, 1542, 146, 159, 233, 256, 287, 319, 350, 351, 358, 489, 498, 516, 557, 605, 640, 644, 654, 787, 914, 920, 980, 1005, 1084, 1125, 1136, 1155, 1195, 1230, 1272, 1473, 1480, 1479, 1646, 529]. **Uzawa** [1220]. **Uzawa-based** [1220].
- V** [936]. **validity** [324]. **valuation** [922, 1658]. **value** [4, 41, 42, 57, 168, 230, 231, 242, 272, 404, 405, 423, 430, 467, 621, 738, 769, 773, 810, 818, 881, 911, 932, 968, 1073, 1157, 1191, 1240, 1256, 1338, 1354, 1465, 1494, 1498, 1497, 1501, 1502, 1561, 1565, 1601, 1551, 1545, 1546]. **valued** [199, 807, 1030, 1093, 1620]. **values** [974, 1438]. **Vandermonde** [889, 1555]. **Vandermonde-like** [889]. **vanishing** [311]. **variable** [50, 95, 218, 346, 358, 421, 430, 826, 996, 995, 1128, 1299, 1402, 1628, 1638]. **variable-degree** [421]. **variable-step** [346]. **variables** [613]. **variably** [274]. **variance** [481]. **variants** [1464]. **variate** [810]. **variation** [173, 263, 264, 851]. **Variational** [871, 1033, 1382, 1391, 1510, 119, 146, 169, 168, 259, 267, 420, 436, 499, 632, 634, 738, 778, 880, 902, 903, 1017, 1090, 1089, 1100, 1263, 1264, 1280, 1294, 1409, 1418, 1511]. **variational-hemivariational** [499]. **variational-iterative** [1409]. **Variational-splitting** [1033]. **varieties** [1554]. **varying** [378, 896]. **Vector** [807, 113, 678, 1245, 1505, 1518]. **Vector-valued** [807]. **vectors** [581, 771]. **velocity** [340, 1113]. **Vera** [783]. **Verification** [301]. **version** [176, 220, 759, 758, 858, 884, 912, 1261, 1419, 1607]. **versions** [1484]. **versus** [479, 798, 810, 887]. **vertex** [645, 735, 740]. **vertex-centered** [645]. **very** [466]. **via** [409, 462, 463, 572, 818, 866, 977, 1202, 1203]. **vibration** [201, 882]. **vibrations** [174].
- Vibro** [1352]. **Vibro-impact** [1352]. **VIes** [37]. **viewpoint** [692]. **Virtual** [737, 340, 355, 502]. **viscoelastic** [146]. **viscoelasticity** [19, 1076]. **viscoplastic** [1080]. **viscosity** [831, 899]. **viscosity-splitting** [831]. **viscous** [1015, 1328]. **volatilities** [922]. **volatility** [1152, 1336]. **Volterra** [129, 133, 191, 237, 306, 305, 309, 307, 308, 500, 563, 822, 918, 923, 965, 1000, 1137, 1138, 1139, 1151, 1164, 1165, 1197, 1371, 1431, 1437, 1509, 1569, 1599, 1623, 1643, 1513, 1549]. **Volterra-type** [563, 1431]. **Volume** [62, 56, 64, 89, 224, 223, 229, 272, 276, 360, 370, 380, 388, 387, 386, 401, 433, 456, 582, 585, 586, 645, 652, 653, 656, 655, 735, 880, 922, 1006, 1251, 1262, 1272, 1284, 1408, 1473, 1574, 1632, 1633, 1634, 1642, 1658, 66, 69, 71, 73]. **volume-preserving** [1642]. **volumes** [501]. **volumetric** [1082]. **Vortex** [1472, 1646]. **vortices** [638, 1493]. **vorticity** [47, 209, 1150]. **Vries** [904, 1066, 1422].
- Waals** [151]. **Wachspress** [793]. **Wachspress-type** [793]. **WAF** [1517]. **walk** [616, 1067]. **walk-on-sphere** [1067]. **Warming** [1525]. **Warming-Beam** [1525]. **water** [80, 202, 265, 1354]. **waterbag** [222]. **Wave** [260, 197, 377, 399, 461, 665, 664, 663, 666, 687, 757, 845, 866, 903, 915, 916, 943, 977, 1049, 1077, 1121, 1163, 1261, 1354, 1592, 1607]. **Wave-number** [260]. **wave-structure** [915]. **wave-thermoelastic** [916]. **waveform** [1400, 1611]. **waveguide** [1082]. **Wavelet** [217, 402, 408, 1485]. **wavelet-based** [402]. **wavelets** [1270]. **Wavenumber** [1153]. **waves** [648]. **Weak** [122, 316, 400, 419, 473, 1039, 1246, 43, 121, 243, 299, 839, 1254]. **weakly** [220, 237, 306, 396, 466, 559, 923, 1260, 1284, 1334, 1484, 1509, 1513]. **Weber** [767]. **wedge** [101]. **Weierstrass** [476]. **weight** [399, 1189, 1320]. **Weighted** [327, 1319, 77, 148, 647, 781, 888, 971, 1277,



1362, 1508]. **weights** [1320, 1532]. **Weiner** [1187]. **Weiner-Hopf** [1187]. **Well** [1261, 381, 466, 771, 1278, 1397]. **well-conditioned** [771]. **well-posed** [466, 1397]. **Well-posedness** [1261]. **well-reservoir** [381]. **Wendroff** [1132, 1525]. **Wendroff-type** [1132]. **were** [840]. **Westervelt** [1004]. **which** [795, 1656]. **whole** [1532]. **Wick** [1173]. **wide** [1346]. **wider** [794]. **widths** [459]. **Wiener** [598, 799]. **Willmore** [168]. **Wilson** [415]. **Winther** [364]. **withdrawal** [929]. **without** [1069, 1289, 1345, 1451]. **work** [591, 596]. **Wrap** [872]. **Wrap-around** [872].

**years** [783].

**Zakharov** [883, 1496]. **zeros** [46, 546, 800, 953, 1186, 1187, 1414].

## References

**Abbasi:2019:PDE**

- [1] Bilal Abbasi and Adam M. Oberman. A partial differential equation for the  $|\epsilon|$ -uniformly quasiconvex envelope. *IMA Journal of Numerical Analysis*, 39(1):141–166, January 25, 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/1/141/4641667>.

**Abdulle:2015:FDA**

- [2] Assyr Abdulle and Yun Bai. Fully discrete analysis of the heterogeneous multiscale method for elliptic problems with multiple scales. *IMA Journal of Numerical Analysis*, 35(1):133–160, January 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/1/133>.

**Ablowitz:1991:DSD**

- [3] M. J. Ablowitz, B. M. Herbst, and J. A. C. Weideman. Dynamics of semi-discretizations of the defocusing nonlinear Schrödinger equation. *IMA Journal of Numerical Analysis*, 11(4):539–552, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Abu-Zaid:1994:FDM**

- [4] I. T. Abu-Zaid and M. A. El-Gebeily. A finite-difference method for the spectral approximation of a class of singular two-point boundary value problems. *IMA Journal of Numerical Analysis*, 14(4):545–562, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Acebron:2001:SAC**

- [5] Juan A. Acebrón, Mikhail M. Lavrentiev, Jr., and Renato Spigler. Spectral analysis and computation for the Kuramoto-Sakaguchi integro-parabolic equation. *IMA Journal of Numerical Analysis*, 21(1):239–263, January 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/210239.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210239.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/pdf/210239.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210239.pdf).

**Acevedo:2011:BMF**

- [6] Ramiro Acevedo and Salim Meddahi. An E-based mixed FEM and BEM coupling for a time-dependent eddy current problem. *IMA Journal of Numerical Analysis*, 31(2):667–697, April 2011. CODEN IJNADH.

ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/2/667.full.pdf+html>.

**Achdou:1993:MNS**

- [7] Yves Achdou and Olivier Pironneau. The  $\chi$ -method for the Navier–Stokes equations. *IMA Journal of Numerical Analysis*, 13(4):537–558, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Acker:1988:CRA**

- [8] Andrew Acker. Convergence results for an analytical trial free-boundary method. *IMA Journal of Numerical Analysis*, 8(3):357–364, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Acosta:2012:DSS**

- [9] Carlos D. Acosta and Raimund Bürger. Difference schemes stabilized by discrete mollification for degenerate parabolic equations in two space dimensions. *IMA Journal of Numerical Analysis*, 32(4):1509–1540, October 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/4/1509.full.pdf+html>.

**Acosta:2014:EPN**

- [10] Gabriel Acosta and María G. Armentano. Eigenvalue problems in a non-Lipschitz domain. *IMA Journal of Numerical Analysis*, 34(1):83–95, January 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/1/83.full.pdf+html>.

[oxfordjournals.org/content/34/1/83.full.pdf+html](http://imajna.oxfordjournals.org/content/34/1/83.full.pdf+html).

**Actis:2016:NDF**

- [11] Marcelo Actis, Pedro Morin, and Marilina Carena. Nonlocal diffusions on fractals: qualitative properties and numerical approximations. *IMA Journal of Numerical Analysis*, 36(3):1143–1166, July 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/3/1143>.

**Adam:1991:PIR**

- [12] Gh. Adam and A. Nobile. Product integration rules at Clenshaw–Curtis and related points: a robust implementation. *IMA Journal of Numerical Analysis*, 11(2):271–296, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Adcock:2012:HOR**

- [13] Ben Adcock, Arieh Iserles, and Syvert P. Nørsett. From high oscillation to rapid approximation II: expansions in Birkhoff series. *IMA Journal of Numerical Analysis*, 32(1):105–140, January 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/1/105.full.pdf+html>.

**Adler:2016:FOS**

- [14] James Adler, Scott MacLachlan, and Niall Madden. A first-order system Petrov–Galerkin discretization for a reaction-diffusion problem on a fitted mesh. *IMA Journal of Numerical Analysis*, 36(3):1281–1309, July 2016. CODEN IJNADH.

ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/3/1281>.

**Adler:2002:NMR**

- [15] Roy L. Adler, Jean-Pierre Dedieu, Joseph Y. Margulies, Marco Martens, and Mike Shub. Newton's method on Riemannian manifolds and a geometric model for the human spine. *IMA Journal of Numerical Analysis*, 22(3):359–390, July 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_03/220359.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_03/220359.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_03/pdf/220359.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_03/pdf/220359.pdf).

**Aguillon:2018:EEU**

- [16] Nina Aguillon and Franck Boyer. Error estimate for the upwind scheme for the linear transport equation with boundary data. *IMA Journal of Numerical Analysis*, 38(2):669–719, April 18, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/2/669/3767777>.

**Ahmed:1985:FAP**

- [17] A. H. Ahmed and K. Wright. Further asymptotic properties of collocation matrix norms. *IMA Journal of Numerical Analysis*, 5(2):235–246, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Ahmed:2017:AFS**

- [18] Naveed Ahmed, Tomás Chacón Rebollo, Volker John, and Samuele Rubino. Analysis of a full space-time

discretization of the Navier–Stokes equations by a local projection stabilization method. *IMA Journal of Numerical Analysis*, 37(3):1437–1467, July 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/3/1437/2670061/Analysis-of-a-Full-Space-Time-Discretization-of>.

**Ahn:2009:DFC**

- [19] Jeongho Ahn and David E. Stewart. Dynamic frictionless contact in linear viscoelasticity. *IMA Journal of Numerical Analysis*, 29(1):43–71, January 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Ainsworth:1997:PPC**

- [20] M. Ainsworth, D. W. Kelly, I. H. Sloan, and S. L. Wang. Post-processing with computable error bounds for the finite element approximation of a nonlinear heat conduction problem. *IMA Journal of Numerical Analysis*, 17(4):547–561, October 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_17/Issue\\_04/170547.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_04/170547.sgm.abs.html).

**Ainsworth:2012:CEB**

- [21] Mark Ainsworth, Alejandro Allendes, Gabriel R. Barrenechea, and Richard Rankin. Computable error bounds for nonconforming Fortin–Soulie finite element approximation of the Stokes problem. *IMA Journal of Numerical Analysis*, 32(2):417–447, April 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642

(electronic). URL <http://imajna.oxfordjournals.org/content/32/2/417.full.pdf+html>.

**Ainsworth:2001:CEB**

- [22] Mark Ainsworth and Mark Arnold. Computable error bounds for some simple dimensionally reduced models on thin domains. *IMA Journal of Numerical Analysis*, 21(1):81–105, January 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/210081.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210081.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/pdf/210081.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210081.pdf).

**Ainsworth:2002:USF**

- [23] Mark Ainsworth and Patrick Coggins. A uniformly stable family of mixed hp-finite elements with continuous pressures for incompressible flow. *IMA Journal of Numerical Analysis*, 22(2):307–327, April 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_02/220307.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_02/220307.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_02/pdf/220307.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_02/pdf/220307.pdf).

**Ainsworth:2011:CFE**

- [24] Mark Ainsworth and Richard Rankin. Constant free error bounds for nonuniform order discontinuous Galerkin finite-element approximation on locally refined meshes with hanging nodes. *IMA Journal of Numerical Analysis*, 31(1):254–280, January 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/1/254.full.pdf+html>.

<http://imajna.oxfordjournals.org/content/31/1/254.full.pdf+html>.

**Ainsworth:2017:CEB**

- [25] Mark Ainsworth and Richard Rankin. Computable error bounds for finite element approximation on nonpolygonal domains. *IMA Journal of Numerical Analysis*, 37(2):604–645, April 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/2/604/2670033/Computable-error-bounds-for-finite-element>.

**Aitchison:1984:NMP**

- [26] J. M. Aitchison. Numerical modelling of PIN diodes. *IMA Journal of Numerical Analysis*, 4(1):43–53, January 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Akinola:2014:CJB**

- [27] Richard O. Akinola, Melina A. Freitag, and Alastair Spence. The computation of Jordan blocks in parameter-dependent matrices. *IMA Journal of Numerical Analysis*, 34(3):955–976, July 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/3/955>.

**Akrivis:2018:SII**

- [28] Georgios Akrivis. Stability of implicit and implicit-explicit multistep methods for nonlinear parabolic equations. *IMA Journal of Numerical Analysis*, 38(4):1768–1796, October 16, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/38/4/1768.full.pdf+html>.

academic.oup.com/imajna/article/38/4/1768/4321720.

**Akrivis:2016:LIS**

- [29] Georgios Akrivis, Anna Kalogirou, Demetrios T. Papageorgiou, and Yiorgos-Sokratis Smyrlis. Linearly implicit schemes for multi-dimensional Kuramoto–Sivashinsky type equations arising in falling film flows. *IMA Journal of Numerical Analysis*, 36(1):317–336, January 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/1/317>.

**Akrivis:2018:MNA**

- [30] Georgios Akrivis and Buyang Li. Maximum norm analysis of implicit–explicit backward difference formulae for nonlinear parabolic equations. *IMA Journal of Numerical Analysis*, 38(1):75–101, January 25, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/1/75/3077045>.

**Akrivis:2011:LIM**

- [31] Georgios Akrivis, Demetrios T. Papageorgiou, and Yiorgos-Sokratis Smyrlis. Linearly implicit methods for a semi-linear parabolic system arising in two-phase flows. *IMA Journal of Numerical Analysis*, 31(1):299–321, January 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/1/299.full.pdf+html>.

**Akrivis:1993:FDD**

- [32] Georgios D. Akrivis. Finite difference discretization of the cubic Schrödinger equation. *IMA Journal of Numerical Analysis*, 13(1):115–124, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Al-Baali:1985:DPG**

- [33] M. Al-Baali. Descent property and global convergence of the Fletcher–Reeves method with inexact line search. *IMA Journal of Numerical Analysis*, 5(1):121–124, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Al-Zanaidi:1996:MET**

- [34] M. Al-Zanaidi, C. Grossmann, and R. L. Voller. Monotonous enclosures for the Thomas–Fermi equation in the isolated neutral atom case. *IMA Journal of Numerical Analysis*, 16(3):413–434, July 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_16/Issue\\_03/160413.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_03/160413.sgm.abs.html).

**Alaa:2013:CED**

- [35] Nour Eddine Alaa and Morgan Pierre. Convergence to equilibrium for discretized gradient-like systems with analytic features. *IMA Journal of Numerical Analysis*, 33(4):1291–1321, October 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/4/1291.full.pdf+html>.

**Alaiz:2015:CMN**

- [36] Carlos M. Alaíz, Francesco Dinuzzo, and Suvrit Sra. Correlation matrix nearness and completion under observation uncertainty. *IMA Journal of Numerical Analysis*, 35(1):325–340, January 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/1/325>.

**Allaei:2017:CMT**

- [37] Sonia Seyed Allaei, Zhan-Wen Yang, and Hermann Brunner. Collocation methods for third-kind VIEs. *IMA Journal of Numerical Analysis*, 37(3):1104–1124, July 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/3/1104/2670013/Collocation-methods-for-third-kind-VIEs>.

**Allendes:2016:EEL**

- [38] Alejandro Allendes, Francisco Durán, and Richard Rankin. Error estimation for low-order adaptive finite element approximations for fluid flow problems. *IMA Journal of Numerical Analysis*, 36(4):1715–1747, October 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/4/1715>.

**Allgower:1994:BSC**

- [39] Eugene Allgower, Klaus Böhmer, and Mei Zhen. Branch switching at a corank-4 bifurcation point of semilinear elliptic problems with symmetry. *IMA Journal of Numerical Anal-*

*ysis*, 14(2):161–182, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Almacany:1984:DCA**

- [40] M. Almacany, C. B. Dunham, and J. Williams. Discrete Chebyshev approximation by interpolating rationals. *IMA Journal of Numerical Analysis*, 4(4):467–477, October 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Alonso-Mallo:2017:AOR**

- [41] I. Alonso-Mallo, B. Cano, and N. Reguera. Avoiding order reduction when integrating linear initial boundary value problems with Lawson methods. *IMA Journal of Numerical Analysis*, 37(4):2091–2119, October 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/2091/2422321>.

**Alonso-Mallo:2018:AOR**

- [42] I. Alonso-Mallo, B. Cano, and N. Reguera. Avoiding order reduction when integrating linear initial boundary value problems with exponential splitting methods. *IMA Journal of Numerical Analysis*, 38(3):1294–1323, July 17, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/3/1294/4085564>.

**Altmayer:2017:DHM**

- [43] Martin Altmayer and Andreas Neuenkirch. Discretising the Heston model: an analysis of the weak convergence rate. *IMA Journal of Numerical Analysis*, 37(4):1930–1960, October 1, 2017.

CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/1930/2894466>.

**Amiraslani:2009:LMP**

- [44] A. Amiraslani, R. M. Corless, and P. Lancaster. Linearization of matrix polynomials expressed in polynomial bases. *IMA Journal of Numerical Analysis*, 29(1):141–157, January 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Amrein:2017:AST**

- [45] Mario Amrein and Thomas P. Wihler. An adaptive space-time Newton–Galerkin approach for semilinear singularly perturbed parabolic evolution equations. *IMA Journal of Numerical Analysis*, 37(4):2004–2019, October 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/2004/2670067>.

**Anastasselou:1986:FCD**

- [46] Eleni G. Anastasselou. A formal comparison of the Delves-Lyness and Burniston-Siewert methods for locating the zeros of analytic functions. *IMA Journal of Numerical Analysis*, 6(3):337–341, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Anaya:2017:PVF**

- [47] Verónica Anaya, David Mora, and Ricardo Ruiz-Baier. Pure vorticity formulation and Galerkin discretization for the Brinkman equations. *IMA Journal of Numerical Analysis*, 37(4):

2020–2041, October 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/2020/2670308>.

**Anderson:2015:ARB**

- [48] David F. Anderson and Masanori Koyama. An asymptotic relationship between coupling methods for stochastically modeled population processes. *IMA Journal of Numerical Analysis*, 35(4):1757–1778, October 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/4/1757>.

**Andreani:2008:TRS**

- [49] R. Andreani, J. M. Martínez, and L. Martínez. Trust-region superposition methods for protein alignment. *IMA Journal of Numerical Analysis*, 28(4):690–710, October 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/4/690>.

**Andreani:2005:SPG**

- [50] Roberto Andreani, Ernesto G. Birgin, José Mario Martínez, and Jinyun Yuan. Spectral projected gradient and variable metric methods for optimization with linear inequalities. *IMA Journal of Numerical Analysis*, 25(2):221–252, April 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/25/2/221>; <http://imanum.oupjournals.org/cgi/reprint/25/2/221>.

**Andreani:2017:ESO**

- [51] Roberto Andreani, Gabriel Haeser, Alberto Ramos, and Paulo J. S. Silva. Erratum: “A second-order sequential optimality condition associated to the convergence of optimization algorithms”. *IMA Journal of Numerical Analysis*, 37(4):e1–??, October 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/e1/3859208>. See [52].

**Andreani:2017:SOS**

- [52] Roberto Andreani, Gabriel Haeser, Alberto Ramos, and Paulo J. S. Silva. A second-order sequential optimality condition associated to the convergence of optimization algorithms. *IMA Journal of Numerical Analysis*, 37(4):1902–1929, October 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/1902/2929533>. See erratum [51].

**Andreev:2004:IFE**

- [53] Andrey B. Andreev and Todor D. Todorov. Isoparametric finite-element approximation of a Steklov eigenvalue problem. *IMA Journal of Numerical Analysis*, 24(2):309–322, April 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_02/240309.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_02/240309.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_02/pdf/240309.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_02/pdf/240309.pdf).

**Andreev:2013:SSS**

- [54] Roman Andreev. Stability of sparse space–time finite element discretiza-

tions of linear parabolic evolution equations. *IMA Journal of Numerical Analysis*, 33(1):242–260, January 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/1/242.full.pdf+html>.

**Andreianov:2012:DDG**

- [55] Boris Andreianov, Mostafa Bendahmane, Florence Hubert, and Stella Krell. On 3D DDFV discretization of gradient and divergence operators. I. Meshing, operators and discrete duality. *IMA Journal of Numerical Analysis*, 32(4):1574–1603, October 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/4/1574.full.pdf+html>.

**Andreianov:2006:FVA**

- [56] Boris Andreianov, Franck Boyer, and Florence Hubert. On the finite-volume approximation of regular solutions of the  $p$ -Laplacian. *IMA Journal of Numerical Analysis*, 26(3):472–502, July 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://comjnl.oxfordjournals.org/cgi/content/abstract/26/3/472>; <http://comjnl.oxfordjournals.org/cgi/reprint/26/3/472>.

**Angermann:1992:PES**

- [57] Lutz Angermann. An a posteriori estimation for the solution of elliptic boundary value problems by means of upwind FEM. *IMA Journal of Numerical Analysis*, 12(2):201–215, 1992.



CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Angermann:1995:EEF**

- [58] Lutz Angermann. Error estimates for the finite-element solution of an elliptic singularly perturbed problem. *IMA Journal of Numerical Analysis*, 15(2):161–196, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Annaby:2015:EEA**

- [59] M. H. Annaby and R. M. Asharabi. Error estimates associated with sampling series of the linear canonical transforms. *IMA Journal of Numerical Analysis*, 35(2):931–946, April 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/2/931>.

**Annaby:2007:CES**

- [60] M. H. Annaby and M. M. Tharwat. On computing eigenvalues of second-order linear pencils. *IMA Journal of Numerical Analysis*, 27(2):366–380, April 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/2/366>; <http://imajna.oxfordjournals.org/cgi/reprint/27/2/366>.

**Anonymous:1985:FPC**

- [61] Anonymous. 1985 L. Fox prize: Call for entries. *IMA Journal of Numerical Analysis*, 5(1):1, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Anonymous:1985:IV**

- [62] Anonymous. Index to volume 5. *IMA Journal of Numerical Analysis*, 5(4):501–502, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Anonymous:1985:R**

- [63] Anonymous. Referees 1984–85. *IMA Journal of Numerical Analysis*, 5(4):499–500, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Anonymous:1999:IV**

- [64] Anonymous. Index to volume 19. *IMA Journal of Numerical Analysis*, 19(4):669–670, October 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_04/pdf/190665.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_04/pdf/190665.pdf).

**Anonymous:1999:R**

- [65] Anonymous. Referees 1998–99. *IMA Journal of Numerical Analysis*, 19(4):665–667, October 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_04/pdf/190665.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_04/pdf/190665.pdf).

**Anonymous:2002:IV**

- [66] Anonymous. Index to Volume 22. *IMA Journal of Numerical Analysis*, 22(4):669–670, October 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_04/pdf/220669.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_04/pdf/220669.pdf).

**Anonymous:2002:R**

- [67] Anonymous. Referees 2001–2002. *IMA Journal of Numerical Analysis*, 22(4): 665–667, October 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_04/pdf/220665.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_04/pdf/220665.pdf).

**Anonymous:2004:E**

- [68] Anonymous. Editorial. *IMA Journal of Numerical Analysis*, 24(1): i–??, January 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_01/pdf/24000i.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_01/pdf/24000i.pdf).

**Anonymous:2004:IV**

- [69] Anonymous. Index to Volume 24. *IMA Journal of Numerical Analysis*, 24(4):725–726, October 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/reprint/24/4/725>.

**Anonymous:2004:R**

- [70] Anonymous. Referees 2003–2004. *IMA Journal of Numerical Analysis*, 24(4):721–724, October 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/reprint/24/4/721>.

**Anonymous:2005:IV**

- [71] Anonymous. Index to Volume 25. *IMA Journal of Numerical Analysis*, 25(4):847–849, October 2005. CODEN IJNADH. ISSN 0272-4979 (print),

1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/reprint/25/4/847>.

**Anonymous:2005:R**

- [72] Anonymous. Referees 2004–2005. *IMA Journal of Numerical Analysis*, 25(4):843–845, October 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/reprint/25/4/843>.

**Anonymous:2006:IV**

- [73] Anonymous. Index to Volume 26. *IMA Journal of Numerical Analysis*, 26(4):851–853, October 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/reprint/26/4/851>; <http://imanum.oxfordjournals.org/cgi/reprint/26/4/851>.

**Anonymous:2006:R**

- [74] Anonymous. Referees 2005–2006. *IMA Journal of Numerical Analysis*, 26(4):847–850, October 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/reprint/26/4/847>.

**Anselone:1987:DCA**

- [75] P. M. Anselone and R. Ansoerge. Discrete closure and asymptotic (quasi-) regularity in discretization algorithms. *IMA Journal of Numerical Analysis*, 7(4):431–448, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Antil:2018:PEA**

- [76] Harbir Antil and Enrique Otárola. An a posteriori error analysis for an optimal control problem involving the fractional Laplacian. *IMA Journal of Numerical Analysis*, 38(1):198–226, January 25, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/1/198/3062292>.

**Antil:2018:SAW**

- [77] Harbir Antil, Enrique Otárola, and Abner J. Salgado. Some applications of weighted norm inequalities to the error analysis of PDE-constrained optimization problems. *IMA Journal of Numerical Analysis*, 38(2):852–883, April 18, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/2/852/3858067>.

**Antil:2016:AEE**

- [78] Harbir Antil and Abner J. Salgado. Approximation of elliptic equations with bmo coefficients. *IMA Journal of Numerical Analysis*, 36(1):222–237, January 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/1/222>.

**Antonietti:2018:HOD**

- [79] Paola F. Antonietti, Ilario Mazzieri, Niccolò Dal Santo, and Alfio Quarteroni. A high-order discontinuous Galerkin approximation to ordinary differential equations with applications to elastodynamics. *IMA Jour-*

*nal of Numerical Analysis*, 38(4):1709–1734, October 16, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/4/1709/4581911>.

**Antonopoulos:2017:GFE**

- [80] D. C. Antonopoulos and V. A. Dougalis. Galerkin-finite element methods for the shallow water equations with characteristic boundary conditions. *IMA Journal of Numerical Analysis*, 37(1):266–295, January 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/1/266/2669960/Galerkin-finite-element-methods-for-the-shallow>.

**Apel:2001:NCF**

- [81] Thomas Apel, Serge Nicaise, and Joachim Schöberl. A non-conforming finite element method with anisotropic mesh grading for the Stokes problem in domains with edges. *IMA Journal of Numerical Analysis*, 21(4):843–856, October 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_04/210843.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_04/210843.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_04/pdf/210843.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_04/pdf/210843.pdf).

**Apel:2005:CTI**

- [82] Thomas Apel and Cornelia Pester. Clement-type interpolation on spherical domains—interpolation error estimates and application to a posteriori error estimation. *IMA Journal of Numerical Analysis*, 25(2):310–336, April

2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/25/2/310>; <http://imanum.oupjournals.org/cgi/reprint/25/2/310>. **Araya:2007:SFE**
- [83] Thomas Apel, Max Winkler, and Johannes Pfefferer. Error estimates for the postprocessing approach applied to Neumann boundary control problems in polyhedral domains. *IMA Journal of Numerical Analysis*, 38(4):1984–2025, October 16, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/4/1984/4389275>. **Apel:2018:EEP**
- [84] Adérito Araújo, Sílvia Barbeiro, and Pedro Serranho. Stability of finite difference schemes for nonlinear complex reaction-diffusion processes. *IMA Journal of Numerical Analysis*, 35(3):1381–1401, July 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/3/1381>. **Araujo:2015:SFD**
- [85] Rodolfo Araya, Gabriel R. Barrenechea, Fabrice Jaillet, and Rodolfo Rodríguez. Finite-element analysis of a static fluid–solid interaction problem. *IMA Journal of Numerical Analysis*, 31(3):886–913, July 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/3/886.full.pdf+html>. **Araya:2011:FEA**
- [86] Rodolfo Araya, Gabriel R. Barrenechea, and Frédéric Valentin. A stabilized finite-element method for the Stokes problem including element and edge residuals. *IMA Journal of Numerical Analysis*, 27(1):172–197, January 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/1/172>; <http://imajna.oxfordjournals.org/cgi/reprint/27/1/172>. **Araya:2016:LOL**
- [87] Rodolfo Araya, Abner H. Poza, and Frédéric Valentin. A low-order local projection method for the incompressible Navier–Stokes equations in two- and three-dimensions. *IMA Journal of Numerical Analysis*, 36(1):267–295, January 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/1/267>. **Arbenz:1982:CFE**
- [88] P. Arbenz. Computable finite element error bounds for Poisson’s equation. *IMA Journal of Numerical Analysis*, 2(4):475–479, October 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). **Arbogast:2014:PEE**
- [89] T. Arbogast, D. Estep, B. Sheehan, and S. Tavener. A posteriori error estimates for mixed finite element and finite volume methods for problems coupled through a boundary with nonmatching grids. *IMA Journal of*

*Numerical Analysis*, 34(4):1625–1653, October 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/4/1625>.

**Ardenghi:2009:SGM**

- [90] J. I. Ardenghi, T. I. Gibelli, and M. C. Maciel. The spectral gradient method for unconstrained optimal control problems. *IMA Journal of Numerical Analysis*, 29(2):315–331, April 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/2/315>; <http://imajna.oxfordjournals.org/cgi/reprint/29/2/315>.

**Argyros:1998:NNM**

- [91] Ioannis K. Argyros. On a new Newton-Mysovskii-type theorem with applications to inexact Newton-like methods and their discretizations. *IMA Journal of Numerical Analysis*, 18(1):37–56, January 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_01/180037.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_01/180037.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_01/pdf/180037.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_01/pdf/180037.pdf).

**Arioli:2018:FEM**

- [92] Mario Arioli and Michele Benzi. A finite element method for quantum graphs. *IMA Journal of Numerical Analysis*, 38(3):1119–1163, July 17, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/3/1119/3883929>.

[academic.oup.com/imajna/article/38/3/1119/3883929](http://academic.oup.com/imajna/article/38/3/1119/3883929).

**Arioli:2013:DFS**

- [93] Mario Arioli, Drosos Kourounis, and Daniel Loghin. Discrete fractional Sobolev norms for domain decomposition preconditioning. *IMA Journal of Numerical Analysis*, 33(1):318–342, January 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/1/318.full.pdf+html>.

**Arioli:1992:SCC**

- [94] Mario Arioli and Francesco Romani. Stability, convergence, and conditioning of stationary iterative methods of the form  $x^{(i+1)} = Px^{(i)} + q$  for the solution of linear systems. *IMA Journal of Numerical Analysis*, 12(1):21–30, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Aristotelous:2015:ASO**

- [95] Andreas C. Aristotelous, Ohannes A. Karakashian, and Steven M. Wise. Adaptive, second-order in time, primitive-variable discontinuous Galerkin schemes for a Cahn–Hilliard equation with a mass source. *IMA Journal of Numerical Analysis*, 35(3):1167–1198, July 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/3/1167>.

**Arnal:2008:NAM**

- [96] Josep Arnal, Violeta Migallón, José Penadés, and Daniel B. Szyld. Newton additive and multiplicative Schwarz

- iterative methods. *IMA Journal of Numerical Analysis*, 28(1):143–161, January 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/1/143>; <http://imajna.oxfordjournals.org/cgi/reprint/28/1/143>.
- Asaturyan:2001:LSP**
- [97] Souren Asaturyan, Paolo Costantini, and Carla Manni. Local shape-preserving interpolation by space curves. *IMA Journal of Numerical Analysis*, 21(1):301–325, January 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/210301.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210301.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/pdf/210301.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210301.pdf).
- Asharabi:2016:TDC**
- [98] R. M. Asharabi and J. Prestin. On two-dimensional classical and Hermite sampling. *IMA Journal of Numerical Analysis*, 36(2):851–871, April 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/2/851>.
- Asheim:2013:CGQ**
- [99] Andreas Asheim and Daan Huybrechs. Complex Gaussian quadrature for oscillatory integral transforms. *IMA Journal of Numerical Analysis*, 33(4):1322–1341, October 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/4/1322.full.pdf+html>.
- Aston:1996:NMS**
- [100] Philip J. Aston and A. Ganesh Sittampalam. Numerical methods for steady-state mode interactions. *IMA Journal of Numerical Analysis*, 16(3):435–456, July 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_16/Issue\\_03/160435.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_03/160435.sgm.abs.html).
- Atkinson:1984:NSL**
- [101] K. Atkinson and F. de Hoog. The numerical solution of Laplace’s equation on a wedge. *IMA Journal of Numerical Analysis*, 4(1):19–41, January 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Atkinson:1993:DCM**
- [102] K. Atkinson and J. Flores. The discrete collocation method for nonlinear integral equations. *IMA Journal of Numerical Analysis*, 13(2):195–213, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Atkinson:1985:NEP**
- [103] K. E. Atkinson. The numerical evaluation of particular solutions for Poisson’s equation. *IMA Journal of Numerical Analysis*, 5(3):319–338, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Atkinson:1989:DGM**
- [104] K. E. Atkinson and F. A. Potra. On the discrete Galerkin method for Fredholm integral equations of the second

kind. *IMA Journal of Numerical Analysis*, 9(3):385–403, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Atkinson:2000:PRE**

- [105] Kendall Atkinson. The planar radiosity equation and its numerical solution. *IMA Journal of Numerical Analysis*, 20(2):303–332, April 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_02/200303.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_02/200303.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_02/pdf/200303.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_02/pdf/200303.pdf).

**Atkinson:1994:NSN**

- [106] Kendall E. Atkinson. The numerical solution of a non-linear boundary integral equation on smooth surfaces. *IMA Journal of Numerical Analysis*, 14(4):461–483, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Austin:2017:NSS**

- [107] Anthony P. Austin and Kuan Xu. On the numerical stability of the second barycentric formula for trigonometric interpolation in shifted equispaced points. *IMA Journal of Numerical Analysis*, 37(3):1355–1374, July 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/3/1355/2670026/On-the-numerical-stability-of-the-second>.

**Awanou:2015:SFE**

- [108] Gerard Awanou. Standard finite elements for the numerical resolution

of the elliptic Monge–Ampère equation: classical solutions. *IMA Journal of Numerical Analysis*, 35(3):1150–1166, July 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/3/1150>.

**Axelsson:1981:SEE**

- [109] O. Axelsson. Stability and error estimates of Galerkin finite element approximations for convection-diffusion equations. *IMA Journal of Numerical Analysis*, 1(3):329–345, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Axelsson:1997:MPP**

- [110] O. Axelsson, Yu. R. Hakopian, and Yu. A. Kuznetsov. Multilevel preconditioning for perturbed finite element matrices. *IMA Journal of Numerical Analysis*, 17(1):125–149, January 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_17/Issue\\_01/170125.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_01/170125.sgm.abs.html).

**Ayuso:2007:IAM**

- [111] Blanca Ayuso, Javier de Frutos, and Julia Novo. Improving the accuracy of the mini-element approximation to Navier–Stokes equations. *IMA Journal of Numerical Analysis*, 27(1):198–218, January 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/1/198>; <http://imajna.oxfordjournals.org/cgi/reprint/27/1/198>.

**Azaiez:2006:MSE**

- [112] M. Azaïez, F. Ben Belgacem, and C. Bernardi. The mortar spectral element method in domains of operators. Part I: The divergence operator and Darcy's equations. *IMA Journal of Numerical Analysis*, 26(1):131–154, January 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/26/1/131>; <http://imanum.oxfordjournals.org/cgi/reprint/26/1/131>.

**Azaiez:2008:MSE**

- [113] M. Azaïez, F. Ben Belgacem, C. Bernardi, and M. El Rhabi. The mortar spectral element method in domains of operators. Part II: the curl operator and the vector potential problem. *IMA Journal of Numerical Analysis*, 28(1):106–120, January 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/1/106>; <http://imajna.oxfordjournals.org/cgi/reprint/28/1/106>.

**Baart:1982:UAC**

- [114] M. L. Baart. The use of autocorrelation for pseudorank determination in noisy ill-conditioned linear least-squares problems. *IMA Journal of Numerical Analysis*, 2(2):241–247, April 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Baart:1986:QTT**

- [115] M. L. Baart and R. J. Y. McLeod. Quadratic transformations of triangular finite elements in two dimen-

sions. *IMA Journal of Numerical Analysis*, 6(4):475–487, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Babolian:1981:FGS**

- [116] E. Babolian and L. M. Delves. A fast Galerkin scheme for linear integro-differential equations. *IMA Journal of Numerical Analysis*, 1(2):193–213, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Bachmayr:2018:PPS**

- [117] Markus Bachmayr, Albert Cohen, and Wolfgang Dahmen. Parametric PDEs: sparse or low-rank approximations? *IMA Journal of Numerical Analysis*, 38(4):1661–1708, October 16, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/4/1661/4159528>.

**Badea:2004:SNM**

- [118] Lori Badea. On the Schwarz-Neumann method with an arbitrary number of domains. *IMA Journal of Numerical Analysis*, 24(2):215–238, April 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_02/240215.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_02/240215.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_02/pdf/240215.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_02/pdf/240215.pdf).

**Badea:2014:GCR**

- [119] Lori Badea. Global convergence rate of a standard multigrid method for variational inequalities. *IMA Journal of Numerical Analysis*, 34(1):197–216, January 2014. CODEN IJNADH.



ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/1/197.full.pdf+html>.

**Badia:2014:EAD**

- [120] S. Badia, R. Codina, T. Gudi, and J. Guzmán. Error analysis of discontinuous Galerkin methods for the Stokes problem under minimal regularity. *IMA Journal of Numerical Analysis*, 34(2):800–819, April 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/2/800.full.pdf+html>.

**Badia:2014:CTW**

- [121] Santiago Badia and Juan Vicente Gutiérrez-Santacreu. Convergence towards weak solutions of the Navier–Stokes equations for a finite element approximation with numerical subgrid-scale modelling. *IMA Journal of Numerical Analysis*, 34(3):1193–1221, July 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/3/1193>.

**Bai:2018:WMS**

- [122] Jiejing Bai, Chun Li, and Xiao-Yan Liu. Weak multi-symplectic reformulation and geometric numerical integration for the nonlinear Schrödinger equations with delta potentials. *IMA Journal of Numerical Analysis*, 38(1):399–429, January 25, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/1/399/3070515>.

**Bai:2003:RPC**

- [123] Journal Zhong-Zhi Bai and Gui-Qing Li. Restrictively preconditioned conjugate gradient methods for systems of linear equations. *IMA Journal of Numerical Analysis*, 23(4):561–580, October 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_04/230561.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_04/230561.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_04/pdf/230561.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_04/pdf/230561.pdf).

**Bai:1994:NBG**

- [124] Zhaojun Bai, D. Hu, and L. Reichel. A Newton basis GMRES implementation. *IMA Journal of Numerical Analysis*, 14(4):563–581, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Bai:1998:MCM**

- [125] Zhong-Zhi Bai. On the monotone convergence of matrix multisplitting relaxation methods for the linear complementarity problem. *IMA Journal of Numerical Analysis*, 18(4):509–518, October 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_04/180509.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_04/180509.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_04/pdf/180509.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_04/pdf/180509.pdf).

**Bai:2013:PMI**

- [126] Zhong-Zhi Bai, Michele Benzi, Fang Chen, and Zeng-Qi Wang. Preconditioned MHSS iteration methods for a class of block two-by-two linear systems with applications to dis-

tributed control problems. *IMA Journal of Numerical Analysis*, 33(1):343–369, January 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/1/343.full.pdf+html>.

**Bai:2007:AHS**

- [127] Zhong-Zhi Bai and Gene H. Golub. Accelerated Hermitian and skew-Hermitian splitting iteration methods for saddle-point problems. *IMA Journal of Numerical Analysis*, 27(1):1–23, January 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/1/1>; <http://imajna.oxfordjournals.org/cgi/reprint/27/1/1>.

**Baker:2008:ITR**

- [128] C. G. Baker, P.-A. Absil, and K. A. Gallivan. An implicit trust-region method on Riemannian manifolds. *IMA Journal of Numerical Analysis*, 28(4):665–689, October 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/4/665>.

**Baker:1993:CSQ**

- [129] C. T. H. Baker and M. S. Derakhshan. Convergence and stability of quadrature methods applied to Volterra equations with delay. *IMA Journal of Numerical Analysis*, 13(1):67–91, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Baker:1991:SAB**

- [130] Christopher T. H. Baker and Neville J. Ford. Some applications of the boundary-locus method and the method of  $D$ -partitions. *IMA Journal of Numerical Analysis*, 11(2):143–158, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Baker:1994:CSR**

- [131] Christopher T. H. Baker and Christopher A. H. Paul. Computing stability regions—Runge–Kutta methods for delay differential equations. *IMA Journal of Numerical Analysis*, 14(3):347–362, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Baker:1999:SCS**

- [132] M. D. Baker, E. Süli, and A. F. Ware. Stability and convergence of the spectral Lagrange–Galerkin method for mixed periodic/non-periodic convection-dominated diffusion problems. *IMA Journal of Numerical Analysis*, 19(4):637–663, October 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_04/190637.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_04/190637.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_04/pdf/190637.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_04/pdf/190637.pdf).

**Bakke:1992:SAM**

- [133] V. L. Bakke and Z. Jackiewicz. Stability analysis of multilag and modified multilag methods for Volterra integrodifferential equations. *IMA Journal of Numerical Analysis*, 12(2):243–257, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Ball:1983:IBP**

- [134] A. A. Ball. The improved bicubic patch—natural surface counterpart of the parametric cubic segment. *IMA Journal of Numerical Analysis*, 3(3): 373–379, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Banas:2014:CFE**

- [135] Lřbomřr Bařas, Zdzisław Brzeźniak, Mikhail Neklyudov, and Andreas Prohl. A convergent finite-element-based discretization of the stochastic Landau–Lifshitz–Gilbert equation. *IMA Journal of Numerical Analysis*, 34(2):502–549, April 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/2/502.full.pdf+html>.

**Banas:2014:DUC**

- [136] Lubomřr Banas, Marcus Page, Dirk Praetorius, and Jonathan Rochat. A decoupled and unconditionally convergent linear FEM integrator for the Landau–Lifshitz–Gilbert equation with magnetostriction. *IMA Journal of Numerical Analysis*, 34(4):1361–1385, October 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/4/1361>.

**Banjai:2014:TDD**

- [137] Lehel Banjai. Time-domain Dirichlet-to-Neumann map and its discretization. *IMA Journal of Numerical Analysis*, 34(3):1136–1155, July 2014. CODEN IJNADH. ISSN

0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/3/1136>.

**Banjai:2008:HMT**

- [138] Lehel Banjai and Wolfgang Hackbusch. Hierarchical matrix techniques for low- and high-frequency Helmholtz problems. *IMA Journal of Numerical Analysis*, 28(1):46–79, January 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/1/46>; <http://imajna.oxfordjournals.org/cgi/reprint/28/1/46>.

**Banjai:2015:FDK**

- [139] Lehel Banjai, Antonio R. Laliena, and Francisco-Javier Sayas. Fully discrete Kirchhoff formulas with CQ-BEM. *IMA Journal of Numerical Analysis*, 35(2):859–884, April 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/2/859.2>.

**Banjai:2012:PMM**

- [140] Lehel Banjai and Daniel Peterseim. Parallel multistep methods for linear evolution problems. *IMA Journal of Numerical Analysis*, 32(3):1217–1240, July 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/3/1217.full.pdf+html>.

**Bansch:2019:PET**

- [141] Eberhard Bänsch and Andreas Brenner. A posteriori estimates for the two-step backward differentiation formula and discrete regularity for the time-dependent Stokes equations. *IMA Journal of Numerical Analysis*, 39(2):713–759, April 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/2/713/4961331>.

**Bao:2003:EBF**

- [142] Weizhu Bao. Error bounds for the finite-element approximation of the exterior Stokes equations in two dimensions. *IMA Journal of Numerical Analysis*, 23(1):125–148, January 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_01/230125.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_01/230125.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_01/pdf/230125.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_01/pdf/230125.pdf).

**Barbeiro:2005:SFD**

- [143] S. Barbeiro, J. A. Ferreira, and R. D. Grigorieff. Supraconvergence of a finite difference scheme for solutions in  $H^s(0, L)$ . *IMA Journal of Numerical Analysis*, 25(4):797–811, October 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/reprint/25/4/797>.

**Barboteu:2002:NAB**

- [144] Mikäel Barboteu, Weimin Han, and Mircea Sofonea. Numerical analysis

of a bilateral frictional contact problem for linearly elastic materials. *IMA Journal of Numerical Analysis*, 22(3):407–436, July 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_03/220407.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_03/220407.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_03/pdf/220407.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_03/pdf/220407.pdf).

**Barnhill:1981:CFE**

- [145] R. E. Barnhill, J. H. Brown, and A. R. Mitchell. A comparison of finite element error bounds for Poisson’s equation. *IMA Journal of Numerical Analysis*, 1(1):95–103, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Barrenechea:2019:TDS**

- [146] Gabriel R Barrenechea, Ernesto Castillo, and Ramon Codina. Time-dependent semidiscrete analysis of the viscoelastic fluid flow problem using a variational multiscale stabilized formulation. *IMA Journal of Numerical Analysis*, 39(2):792–819, April 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/2/792/4964962>.

**Barrenechea:2015:SAR**

- [147] Gabriel R. Barrenechea, Volker John, and Petr Knobloch. Some analytical results for an algebraic flux correction scheme for a steady convection-diffusion equation in one dimension. *IMA Journal of Numerical Analysis*, 35(4):1729–1756, October 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642

(electronic). URL <http://imajna.oxfordjournals.org/content/35/4/1729>.

**Barrett:1988:ORFb**

- [148] J. W. Barrett, G. Moore, and K. W. Morton. Optimal recovery in the finite-element method. I. Recovery from weighted  $L^2$  fits. *IMA Journal of Numerical Analysis*, 8(2):149–184, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Barrett:1988:ORFa**

- [149] J. W. Barrett, G. Moore, and K. W. Morton. Optimal recovery in the finite-element method. II. Defect correction for ordinary differential equations. *IMA Journal of Numerical Analysis*, 8(4):527–540, October 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Barrett:1981:OPG**

- [150] J. W. Barrett and K. W. Morton. Optimal Petrov–Galerkin methods through approximate symmetrization. *IMA Journal of Numerical Analysis*, 1(4):439–468, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Barrett:2004:CFE**

- [151] J. W. Barrett and R. Nürnberg. Convergence of a finite-element approximation of surfactant spreading on a thin film in the presence of van der Waals forces. *IMA Journal of Numerical Analysis*, 24(2):323–363, April 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_24/](http://www3.oup.co.uk/imanum/hdb/Volume_24/)

[http://www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_02/pdf/240323.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_02/pdf/240323.pdf);

**Barrett:1996:EBF**

- [152] John W. Barrett and James F. Blowey. An error bound for the finite element approximation of a model for phase separation of a multi-component alloy. *IMA Journal of Numerical Analysis*, 16(2):257–287, April 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_16/Issue\\_02/160257.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_02/160257.sgm.abs.html).

**Barrett:1998:FEA**

- [153] John W. Barrett and James F. Blowey. Finite element approximation of a model for phase separation of a multi-component alloy with a concentration-dependent mobility matrix. *IMA Journal of Numerical Analysis*, 18(2):287–328, April 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_02/180287.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_02/180287.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_02/pdf/180287.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_02/pdf/180287.pdf).

**Barrett:1999:IEB**

- [154] John W. Barrett and James F. Blowey. An improved error bound for a finite element approximation of a model for phase separation of a multi-component alloy. *IMA Journal of Numerical Analysis*, 19(1):147–168, January 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_01/190147.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_01/190147.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_01/190147.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_01/190147.pdf).

[//www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_01/pdf/190147.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_01/pdf/190147.pdf).

**Barrett:2002:FEA**

- [155] John W. Barrett and James F. Blowey. Finite element approximation of an Allen–Cahn/Cahn–Hilliard system. *IMA Journal of Numerical Analysis*, 22(1):11–71, January 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_01/220011.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_01/220011.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_01/pdf/220011.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_01/pdf/220011.pdf).

**Barrett:2018:CFE**

- [156] John W. Barrett and Sébastien Boyaval. Corrigendum to: Finite element approximation of the FENE-P model. *IMA Journal of Numerical Analysis*, 38(4):2166–2168, October 16, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/4/2166/5052138>. See [157].

**Barrett:2018:FEA**

- [157] John W. Barrett and Sébastien Boyaval. Finite element approximation of the FENE-P model. *IMA Journal of Numerical Analysis*, 38(4):1599–1660, October 16, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/4/1599/4561632>. See corrigendum [156].

**Barrett:1991:FEA**

- [158] John W. Barrett, Roma Chakrabarti, and Charles M. Elliott. Finite ele-

ment approximation of a rigid punch indenting a membrane. *IMA Journal of Numerical Analysis*, 11(4):579–594, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Barrett:1984:FEM**

- [159] John W. Barrett and Charles M. Elliott. A finite-element method for solving elliptic equations with Neumann data on a curved boundary using unfitted meshes. *IMA Journal of Numerical Analysis*, 4(3):309–325, July 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Barrett:1986:TFE**

- [160] John W. Barrett and Charles M. Elliott. Total flux estimates for a finite-element approximation of parabolic equations. *IMA Journal of Numerical Analysis*, 6(3):253–264, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Barrett:1987:FUF**

- [161] John W. Barrett and Charles M. Elliott. Fitted and unfitted finite-element methods for elliptic equations with smooth interfaces. *IMA Journal of Numerical Analysis*, 7(3):283–300, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Barrett:1987:TFE**

- [162] John W. Barrett and Charles M. Elliott. Total flux estimates for a finite-element approximation of elliptic equations. *IMA Journal of Numerical Analysis*, 7(2):129–148, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Barrett:1988:FEA**

- [163] John W. Barrett and Charles M. Elliott. Finite-element approximation of elliptic equations with a Neumann or Robin condition on a curved boundary. *IMA Journal of Numerical Analysis*, 8(3):321–342, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Barrett:1989:FEA**

- [164] John W. Barrett and Charles M. Elliott. Finite-element approximation of a plasma equilibrium problem. *IMA Journal of Numerical Analysis*, 9(4):443–464, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Barrett:2008:NAA**

- [165] John W. Barrett, Harald Garcke, and Robert Nürnberg. Numerical approximation of anisotropic geometric evolution equations in the plane. *IMA Journal of Numerical Analysis*, 28(2):292–330, April 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/2/292>; <http://imajna.oxfordjournals.org/cgi/reprint/28/2/292>.

**Barrett:2010:NAG**

- [166] John W. Barrett, Harald Garcke, and Robert Nürnberg. Numerical approximation of gradient flows for closed curves in  $d$ . *IMA Journal of Numerical Analysis*, 30(1):4–60, January 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/1/4>;

[//imajna.oxfordjournals.org/cgi/content/abstract/30/1/4](http://imajna.oxfordjournals.org/cgi/content/abstract/30/1/4); <http://imajna.oxfordjournals.org/cgi/reprint/30/1/4>.

**Barrett:2014:SPF**

- [167] John W. Barrett, Harald Garcke, and Robert Nürnberg. Stable phase field approximations of anisotropic solidification. *IMA Journal of Numerical Analysis*, 34(4):1289–1327, October 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/4/1289>.

**Barrett:2017:SVA**

- [168] John W. Barrett, Harald Garcke, and Robert Nürnberg. Stable variational approximations of boundary value problems for Willmore flow with Gaussian curvature. *IMA Journal of Numerical Analysis*, 37(4):1657–1709, October 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/1657/3063839>.

**Barrett:2015:SSN**

- [169] John W. Barrett and Leonid Prigozhin. Sandpiles and superconductors: non-conforming linear finite element approximations for mixed formulations of quasi-variational inequalities. *IMA Journal of Numerical Analysis*, 35(1):1–38, January 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/1/1>.

**Barrett:2009:NAC**

- [170] John W. Barrett and Endre Süli. Numerical approximation of corotational dumbbell models for dilute polymers. *IMA Journal of Numerical Analysis*, 29(4):937–959, October 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/4/937>; <http://imajna.oxfordjournals.org/cgi/reprint/29/4/937>.

**Barrios:2010:PPE**

- [171] Tomás P. Barrios and Rommel Bustinza. A priori and a posteriori error analyses of an augmented discontinuous Galerkin formulation. *IMA Journal of Numerical Analysis*, 30(4):987–1008, October 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/30/4/987.full.pdf+html>.

**Bartels:2013:SSA**

- [172] Sören Bartels. A simple scheme for the approximation of the elastic flow of inextensible curves. *IMA Journal of Numerical Analysis*, 33(4):1115–1125, October 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/4/1115.full.pdf+html>.

**Bartels:2016:BSS**

- [173] Sören Bartels. Broken Sobolev space iteration for total variation regularized minimization problems. *IMA Journal of Numerical Analysis*, 36(2):493–502, April 2016. CODEN IJNADH.

ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/2/493>.

**Bartels:2016:SSA**

- [174] Sören Bartels. A simple scheme for the approximation of elastic vibrations of inextensible curves. *IMA Journal of Numerical Analysis*, 36(3):1051–1071, July 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/3/1051>.

**Bartels:2018:SSA**

- [175] Sören Bartels, Philipp Reiter, and Johannes Riege. A simple scheme for the approximation of self-avoiding inextensible curves. *IMA Journal of Numerical Analysis*, 38(2):543–565, April 18, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/2/543/3829872>.

**Bartholomew-Biggs:1988:GCV**

- [176] M. C. Bartholomew-Biggs. A globally convergent version of REQP for constrained minimization. *IMA Journal of Numerical Analysis*, 8(2):253–271, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Barzilai:1988:TPS**

- [177] Jonathan Barzilai and Jonathan M. Borwein. Two-point step size gradient methods. *IMA Journal of Numerical Analysis*, 8(1):141–148, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).



**Bauermeister:2010:FEA**

- [178] Norbert Bauermeister and Simon Shaw. Finite-element approximation of non-Fickian polymer diffusion. *IMA Journal of Numerical Analysis*, 30(3): 702–730, July 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/3/702>; <http://imajna.oxfordjournals.org/cgi/reprint/30/3/702>.

**Bause:2005:OCR**

- [179] Markus Bause. On optimal convergence rates for higher-order Navier–Stokes approximations. I. Error estimates for the spatial discretization. *IMA Journal of Numerical Analysis*, 25(4):812–841, October 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/reprint/25/4/812>.

**Beatson:1997:FER**

- [180] R. K. Beatson and W. A. Light. Fast evaluation of radial basis functions: methods for two-dimensional polyharmonic splines. *IMA Journal of Numerical Analysis*, 17(3): 343–372, July 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_17/Issue\\_03/170343.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_03/170343.sgm.abs.html).

**Beatson:1992:UIR**

- [181] R. K. Beatson and M. J. D. Powell. Univariate interpolation on a regular finite grid by a multiquadric plus a linear polynomial. *IMA Journal of Numerical Analysis*, 12(1):107–133, 1992.

CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Beatson:2007:FEP**

- [182] R. K. Beatson, M. J. D. Powell, and A. M. Tan. Fast evaluation of polyharmonic splines in three dimensions. *IMA Journal of Numerical Analysis*, 27(3): 427–450, July 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/3/427>; <http://imajna.oxfordjournals.org/cgi/reprint/27/3/427>.

**Beatson:2014:PCS**

- [183] R. K. Beatson, Wolfgang zu Castell, and Yuan Xu. A Pólya criterion for (strict) positive-definiteness on the sphere. *IMA Journal of Numerical Analysis*, 34(2):550–568, April 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/2/550.full.pdf+html>.

**Behforooz:1981:ECI**

- [184] G. H. Behforooz and N. Papamichael. End conditions for interpolatory quintic splines. *IMA Journal of Numerical Analysis*, 1(1):81–93, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Behie:1983:CFI**

- [185] A. Behie and P. Forsyth, Jr. Comparison of fast iterative methods for symmetric systems. *IMA Journal of Numerical Analysis*, 3(1):41–63, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Belenki:2012:OAF**

- [186] Liudmila Belenki, Lars Diening, and Christian Kreuzer. Optimality of an adaptive finite element method for the  $p$ -Laplacian equation. *IMA Journal of Numerical Analysis*, 32(2):484–510, April 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/2/484.full.pdf+html>.

**Belgacem:2012:UCB**

- [187] Faker Ben Belgacem, Christine Bernardi, Adel Blouza, and Martin Vohralík. On the unilateral contact between membranes. Part 2: a posteriori analysis and numerical experiments. *IMA Journal of Numerical Analysis*, 32(3):1147–1172, July 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/3/1147.full.pdf+html>.

**Belhachmi:2004:RPE**

- [188] Z. Belhachmi. Residual a posteriori error estimates for a 3D mortar finite-element method: the Stokes system. *IMA Journal of Numerical Analysis*, 24(3):521–547, July 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_03/240521.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_03/240521.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_03/pdf/240521.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_03/pdf/240521.pdf).

**Belhachmi:2006:FEA**

- [189] Zakaria Belhachmi, Dorin Bucur, and Jean-Marc Sac-Epee. Finite element approximation of the Neumann

eigenvalue problem in domains with multiple cracks. *IMA Journal of Numerical Analysis*, 26(4):790–810, October 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/26/4/790>; <http://imajna.oxfordjournals.org/cgi/reprint/26/4/790>.

**Bellavia:2015:SLC**

- [190] S. Bellavia and B. Morini. Strong local convergence properties of adaptive regularized methods for nonlinear least squares. *IMA Journal of Numerical Analysis*, 35(2):947–968, April 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/2/947>.

**Bellen:1990:SAR**

- [191] A. Bellen, Z. Jackiewicz, R. Vermiglio, and M. Zennaro. Stability analysis of Runge–Kutta methods for Volterra integral equations of the second kind. *IMA Journal of Numerical Analysis*, 10(1):103–118, January 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Bellen:2002:PSN**

- [192] Alfredo Bellen. Preservation of superconvergence in the numerical integration of delay differential equations with proportional delay. *IMA Journal of Numerical Analysis*, 22(4):529–536, October 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_04/220529.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_04/220529.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_04/220529.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_04/220529.pdf).

[//www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_04/pdf/220529.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_04/pdf/220529.pdf).

**Bellettini:1996:NSM**

- [193] G. Bellettini and M. Paolini. Numerical simulations of measurements of capillary contact angles. *IMA Journal of Numerical Analysis*, 16(2):165–178, April 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_16/Issue\\_02/160165.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_02/160165.sgm.abs.html).

**Beltran:2011:ECN**

- [194] Carlos Beltrán. Estimates on the condition number of random rank-deficient matrices. *IMA Journal of Numerical Analysis*, 31(1):25–39, January 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/1/25.full.pdf+html>.

**Belward:1985:FSA**

- [195] J. A. Belward. Further studies of the application of constrained minimization methods to Fredholm integral equations of the first kind. *IMA Journal of Numerical Analysis*, 5(2):125–139, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Ben-Artzi:2018:DFO**

- [196] Matania Ben-Artzi, Jean-Pierre Croisille, Dalia Fishelov, and Ron Katzir. Discrete fourth-order Sturm–Liouville problems. *IMA Journal of Numerical Analysis*, 38(3):1485–1522, July 17, 2018. CODEN IJNADH. ISSN 0272-4979 (print),

1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/3/1485/4084722>.

**Bendali:2014:LAR**

- [197] Abderrahmane Bendali, Yassine Boubendir, and Nicolas Zerbib. Localized adaptive radiation condition for coupling boundary and finite element methods applied to wave propagation problems. *IMA Journal of Numerical Analysis*, 34(3):1240–1265, July 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/3/1240>.

**Benouahmane:2019:NMC**

- [198] Brahim Benouahmane, Cuyt Annie, and Irem Yaman. Near-minimal cubature formulae on the disk. *IMA Journal of Numerical Analysis*, 39(1):297–314, January 25, 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/1/297/4718074>.

**Benzi:2008:BPR**

- [199] Michele Benzi and Daniele Bertaccini. Block preconditioning of real-valued iterative algorithms for complex linear systems. *IMA Journal of Numerical Analysis*, 28(3):598–618, July 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/3/598>; <http://imajna.oxfordjournals.org/cgi/reprint/28/3/598>.

**Bermejo:2010:SLG**

- [200] R. Bermejo and J. Carpio. A semi-Lagrangian–Galerkin projection scheme for convection equations. *IMA Journal of Numerical Analysis*, 30(3):799–831, July 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/3/799>; <http://imajna.oxfordjournals.org/cgi/reprint/30/3/799>.

**Bermudez:2006:ASA**

- [201] A. Bermúdez, P. Gamallo, M. R. Nogueiras, and R. Rodríguez. Approximation of a structural acoustic vibration problem by hexahedral finite elements. *IMA Journal of Numerical Analysis*, 26(2):391–421, April 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/26/2/391>; <http://imanum.oxfordjournals.org/cgi/reprint/26/2/391>.

**Bermudez:1991:SSW**

- [202] A. Bermúdez, C. Rodríguez, and M. A. Vilar. Solving shallow water equations by a mixed implicit finite element method. *IMA Journal of Numerical Analysis*, 11(1):79–97, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Bermudez:2012:NST**

- [203] Alfredo Bermúdez, Bibiana López-Rodríguez, Rodolfo Rodríguez, and Pilar Salgado. Numerical solution of transient eddy current problems with input current intensities

as boundary data. *IMA Journal of Numerical Analysis*, 32(3):1001–1029, July 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/3/1001.full.pdf+html>.

**Bermudez:2010:NAF**

- [204] Alfredo Bermúdez, Carlos Reales, Rodolfo Rodríguez, and Pilar Salgado. Numerical analysis of a finite-element method for the axisymmetric eddy current model of an induction furnace. *IMA Journal of Numerical Analysis*, 30(3):654–676, July 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/3/654>; <http://imajna.oxfordjournals.org/cgi/reprint/30/3/654>.

**BermudezdeCastroLopez:1982:MME**

- [205] A. Bermúdez de Castro López. A mixed method for the elastoplastic torsion problem. *IMA Journal of Numerical Analysis*, 2(3):325–334, July 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Bernardi:1990:SGS**

- [206] Christine Bernardi, Claudio Canuto, Yvon Maday, and Brigitte Métivet. Single-grid spectral collocation for the Navier–Stokes equations. *IMA Journal of Numerical Analysis*, 10(2):253–297, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Bernardi:2014:PAS**

- [207] Christine Bernardi, Linda El Alaoui,

and Zoubida Mghazli. A posteriori analysis of a space and time discretization of a nonlinear model for the flow in partially saturated porous media. *IMA Journal of Numerical Analysis*, 34(3):1002–1036, July 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/3/1002>.

**Bernardi:2001:EIM**

- [208] Christine Bernardi, Nicolas Fiétier, and Robert G. Owens. An error indicator for mortar element solutions to the Stokes problem. *IMA Journal of Numerical Analysis*, 21(4):857–886, October 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_04/210857.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_04/210857.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_04/pdf/210857.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_04/pdf/210857.pdf).

**Bernardi:1992:MSE**

- [209] Christine Bernardi, Vivette Girault, and Yvon Maday. Mixed spectral element approximation of the Navier–Stokes equations in the stream-function and vorticity formulation. *IMA Journal of Numerical Analysis*, 12(4):565–608, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Bernardi:1987:MMT**

- [210] Christine Bernardi, Edwige Godlewski, and Geneviève Raugel. A mixed method for the time-dependent Navier–Stokes problem. *IMA Journal of Numerical Analysis*, 7(2):165–189, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Bernardi:2013:PAF**

- [211] Christine Bernardi, Frédéric Hecht, Hervé Le Dret, and Adel Blouza. A posteriori analysis of a finite element discretization of a Naghdi shell model. *IMA Journal of Numerical Analysis*, 33(1):190–211, January 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/1/190.full.pdf+html>.

**Bernardi:2010:NFE**

- [212] Christine Bernardi, Frédéric Hecht, and Fatma Zohra Nouri. A new finite-element discretization of the Stokes problem coupled with the Darcy equations. *IMA Journal of Numerical Analysis*, 30(1):61–93, January 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/1/61>; <http://imajna.oxfordjournals.org/cgi/reprint/30/1/61>.

**Bernardi:2016:SDD**

- [213] Christine Bernardi, Sarra Maarouf, and Driss Yakoubi. Spectral discretization of Darcy’s equations coupled with the heat equation. *IMA Journal of Numerical Analysis*, 36(3):1193–1216, July 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/3/1193>.

**Bernardi:2015:PEA**

- [214] Christine Bernardi and Toni Sayah. A posteriori error analysis of the time-

dependent Stokes equations with mixed boundary conditions. *IMA Journal of Numerical Analysis*, 35(1):179–198, January 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/1/179>.

**Berrone:2008:TSP**

- [215] Stefano Berrone and Endre Süli. Two-sided a posteriori error bounds for incompressible quasi-Newtonian flows. *IMA Journal of Numerical Analysis*, 28(2):382–421, April 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/2/382>; <http://imajna.oxfordjournals.org/cgi/reprint/28/2/382>.

**Berselli:2015:OEE**

- [216] Luigi C. Berselli, Lars Diening, and Michael Ruzicka. Optimal error estimate for semi-implicit space–time discretization for the equations describing incompressible generalized Newtonian fluids. *IMA Journal of Numerical Analysis*, 35(2):680–697, April 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/2/680>.

**Bertoluzza:2000:WSP**

- [217] Silvia Bertoluzza and Angela Kunoth. Wavelet stabilization and preconditioning for domain decomposition. *IMA Journal of Numerical Analysis*, 20(4):533–559, October 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-

3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_04/200533.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_04/200533.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_04/pdf/200533.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_04/pdf/200533.pdf).

**Berzins:1981:GCM**

- [218] M. Berzins and P. M. Dew. A generalized Chebyshev method for nonlinear parabolic equations in one space variable. *IMA Journal of Numerical Analysis*, 1(4):469–487, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Berzins:1987:NCM**

- [219] M. Berzins and P. M. Dew. A note on  $C^0$  Chebyshev methods for parabolic P.D.E.s. *IMA Journal of Numerical Analysis*, 7(1):15–37, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Bespalov:2010:HVB**

- [220] Alexei Bespalov and Norbert Heuer. The hp-version of the boundary element method with quasi-uniform meshes for weakly singular operators on surfaces. *IMA Journal of Numerical Analysis*, 30(2):377–400, April 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/2/377>; <http://imajna.oxfordjournals.org/cgi/reprint/30/2/377>.

**Bespalov:2010:NBE**

- [221] Alexei Bespalov and Norbert Heuer. Natural  $p$ -BEM for the electric field integral equation on screens. *IMA Journal of Numerical Analysis*, 30(3):595–

628, July 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/3/595>; <http://imajna.oxfordjournals.org/cgi/reprint/30/3/595>.

**Besse:2017:DGf**

- [222] Nicolas Besse. Discontinuous Galerkin finite element methods for the gyrokinetic-waterbag equations. *IMA Journal of Numerical Analysis*, 37(2):985–1040, April 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/2/985/2669952/Discontinuous-Galerkin-finite-element-methods-for>.

**Bessemoulin-Chatard:2015:DFI**

- [223] Marianne Bessemoulin-Chatard, Claire Chainais-Hillairet, and Francis Filbet. On discrete functional inequalities for some finite volume schemes. *IMA Journal of Numerical Analysis*, 35(3):1125–1149, July 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/3/1125>.

**Bessemoulin-Chatard:2014:FVS**

- [224] Marianne Bessemoulin-Chatard and Ansgar Jüngel. A finite volume scheme for a Keller–Segel model with additional cross-diffusion. *IMA Journal of Numerical Analysis*, 34(1):96–122, January 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/1/96.full.pdf+html>.

**Betcke:2014:SDN**

- [225] T. Betcke, J. Phillips, and E. A. Spence. Spectral decompositions and nonnormality of boundary integral operators in acoustic scattering. *IMA Journal of Numerical Analysis*, 34(2):700–731, April 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/2/700.full.pdf+html>.

**Betcke:2007:GFD**

- [226] Timo Betcke. A GSVD formulation of a domain decomposition method for planar eigenvalue problems. *IMA Journal of Numerical Analysis*, 27(3):451–478, July 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/3/451>; <http://imajna.oxfordjournals.org/cgi/reprint/27/3/451>.

**Beyn:1990:NCC**

- [227] W.-J. Beyn. The numerical computation of connecting orbits in dynamical systems. *IMA Journal of Numerical Analysis*, 10(3):379–405, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Beyn:1994:NAH**

- [228] W.-J. Beyn. Numerical analysis of homoclinic orbits emanating from a Takens–Bogdanov point. *IMA Journal of Numerical Analysis*, 14(3):381–410, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Bi:2011:FVE**

- [229] Chunjia Bi and Victor Ginting. Finite-volume-element method for second-order quasilinear elliptic problems. *IMA Journal of Numerical Analysis*, 31(3):1062–1089, July 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/3/1062.full.pdf+html>.

**Bialecki:1991:SCM**

- [230] Bernard Bialecki. Sinc-collocation methods for two-point boundary value problems. *IMA Journal of Numerical Analysis*, 11(3):357–375, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Bialecki:2004:PGM**

- [231] Journal B. Bialecki, M. Ganesh, and K. Mustapha. A Petrov–Galerkin method with quadrature for elliptic boundary value problems. *IMA Journal of Numerical Analysis*, 24(1):157–177, January 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_01/240157.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_01/240157.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_01/pdf/240157.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_01/pdf/240157.pdf).

**Bialecki:2003:OSC**

- [232] Journal Bernard Bialecki and Ryan I. Fernandes. An orthogonal spline collocation alternating direction implicit method for second-order hyperbolic problems. *IMA Journal of Numerical Analysis*, 23(4):693–718, October 2003. CODEN IJNADH.

ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_04/230693.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_04/230693.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_04/pdf/230693.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_04/pdf/230693.pdf).

**Binding:1993:NMU**

- [233] P. A. Binding, Patrick J. Browne, and Xing Zhi Ji. A numerical method using the Prüfer transformation for the calculation of eigenpairs of two-parameter Sturm–Liouville problems. *IMA Journal of Numerical Analysis*, 13(4):559–569, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Birgin:2003:ISP**

- [234] Journal Ernesto G. Birgin, José Mario Martínez, and Marcos Raydan. Inexact spectral projected gradient methods on convex sets. *IMA Journal of Numerical Analysis*, 23(4):539–559, October 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_04/230539.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_04/230539.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_04/pdf/230539.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_04/pdf/230539.pdf).

**Bjorhus:1998:OSA**

- [235] Morten Bjørhus. Operator splitting for abstract Cauchy problems. *IMA Journal of Numerical Analysis*, 18(3):419–443, July 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_03/180419.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_03/180419.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_03/pdf/180419.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_03/pdf/180419.pdf).



**Blanes:2018:CAH**

- [236] Sergio Blanes, Fernando Casas, and Mechthild Thalhammer. Convergence analysis of high-order commutator-free quasi-Magnus exponential integrators for nonautonomous linear evolution equations of parabolic type. *IMA Journal of Numerical Analysis*, 38(2):743–778, April 18, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/2/743/3799994>.

**Blank:1995:SCW**

- [237] Luise Blank. Stability of collocation for weakly singular Volterra equations. *IMA Journal of Numerical Analysis*, 15(3):357–375, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Blank:2013:NAC**

- [238] Luise Blank, Harald Garcke, Lavinia Sarbu, and Vanessa Styles. Non-local Allen–Cahn systems: analysis and a primal-dual active set method. *IMA Journal of Numerical Analysis*, 33(4):1126–1155, October 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/4/1126.full.pdf+html>.

**Blaschke:1997:CRI**

- [239] Barbara Blaschke, Andreas Neubauer, and Otmar Scherzer. On convergence rates for the iteratively regularized Gauss–Newton method. *IMA Journal of Numerical Analysis*, 17(3):421–436, July 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-

3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_17/Issue\\_03/170421.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_03/170421.sgm.abs.html).

**Blowey:1996:NAM**

- [240] J. F. Blowey, M. I. M. Copetti, and C. M. Elliott. Numerical analysis of a model for phase separation of a multi-component alloy. *IMA Journal of Numerical Analysis*, 16(1):111–139, January 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_16/Issue\\_01/160111.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_01/160111.sgm.abs.html).

**Boffi:2017:RBP**

- [241] Daniele Boffi, Lucia Gastaldi, Rodolfo Rodríguez, and Ivana Sebestová. Residual-based a posteriori error estimation for the Maxwell’s eigenvalue problem. *IMA Journal of Numerical Analysis*, 37(4):1710–1732, October 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/1710/2870659>.

**Bogucz:1984:FOF**

- [242] E. A. Bogucz and J. D. A. Walker. Fourth-order finite-difference methods for two-point boundary value problems. *IMA Journal of Numerical Analysis*, 4(1):69–82, January 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Boiveau:2016:PFN**

- [243] Thomas Boiveau and Erik Burman. A penalty-free Nitsche method for the weak imposition of boundary

conditions in compressible and incompressible elasticity. *IMA Journal of Numerical Analysis*, 36(2):770–795, April 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/2/770>.

**Bokil:2012:ASH**

- [244] V. A. Bokil and N. L. Gibson. Analysis of spatial high-order finite difference methods for Maxwell’s equations in dispersive media. *IMA Journal of Numerical Analysis*, 32(3):926–956, July 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/3/926.full.pdf+html>.

**Bollapragada:2019:EIS**

- [245] Raghu Bollapragada, Richard H Byrd, and Jorge Nocedal. Exact and inexact subsampled Newton methods for optimization. *IMA Journal of Numerical Analysis*, 39(2):545–578, April 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/2/545/4959058>.

**Bonelle:2015:ACD**

- [246] Jérôme Bonelle and Alexandre Ern. Analysis of compatible discrete operator schemes for the Stokes equations on polyhedral meshes. *IMA Journal of Numerical Analysis*, 35(4):1672–1697, October 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/4/1672>.

**Bonettini:2011:IBC**

- [247] Silvia Bonettini. Inexact block coordinate descent methods with application to non-negative matrix factorization. *IMA Journal of Numerical Analysis*, 31(4):1431–1452, October 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/4/1431.full.pdf+html>.

**Bonito:2017:CP**

- [248] Andrea Bonito and Joseph E. Pasciak. Corrigendum to the paper “Numerical approximation of fractional powers of regularly accretive operators”. *IMA Journal of Numerical Analysis*, 37(4):2170, October 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/2170/3100450>. See [249].

**Bonito:2017:NAF**

- [249] Andrea Bonito and Joseph E. Pasciak. Numerical approximation of fractional powers of regularly accretive operators. *IMA Journal of Numerical Analysis*, 37(3):1245–1273, July 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/3/1245/2670037/Numerical-approximation-of-fractional-powers-of>. See corrigendum [248].

**Bonizzoni:2014:MEM**

- [250] Francesca Bonizzoni, Annalisa Buffa, and Fabio Nobile. Moment equations for the mixed formulation of the Hodge Laplacian with stochastic loading term. *IMA Journal of*

*Numerical Analysis*, 34(4):1328–1360, October 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/4/1328>.

**Bonnaillie-Noel:2016:ENC**

- [251] V. Bonnaillie-Noël, J. A. Carrillo, T. Goudon, and G. A. Pavliotis. Efficient numerical calculation of drift and diffusion coefficients in the diffusion approximation of kinetic equations. *IMA Journal of Numerical Analysis*, 36(4):1536–1569, October 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/4/1536>.

**Bonnans:2006:EES**

- [252] J. Frédéric Bonnans, Stefania Maroso, and Housnaa Zidani. Error estimates for stochastic differential games: the adverse stopping case. *IMA Journal of Numerical Analysis*, 26(1):188–212, January 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/26/1/188>; <http://imanum.oxfordjournals.org/cgi/reprint/26/1/188>.

**Bornemann:2007:MUN**

- [253] Folkmar Bornemann. A model for understanding numerical stability. *IMA Journal of Numerical Analysis*, 27(2):219–231, April 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/>

[abstract/27/2/219](http://imajna.oxfordjournals.org/cgi/reprint/27/2/219); <http://imajna.oxfordjournals.org/cgi/reprint/27/2/219>.

**Bornemann:2013:OCH**

- [254] Folkmar Bornemann and Georg Wechselberger. Optimal contours for high-order derivatives. *IMA Journal of Numerical Analysis*, 33(2):403–412, April 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/2/403.full.pdf+html>.

**Borsdorf:2010:PNA**

- [255] Rüdiger Borsdorf and Nicholas J. Higham. A preconditioned Newton algorithm for the nearest correlation matrix. *IMA Journal of Numerical Analysis*, 30(1):94–107, January 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/1/94>; <http://imajna.oxfordjournals.org/cgi/reprint/30/1/94>.

**Borwein:1992:FEG**

- [256] J. M. Borwein and I. J. Zucker. Fast evaluation of the gamma function for small rational fractions using complete elliptic integrals of the first kind. *IMA Journal of Numerical Analysis*, 12(4):519–526, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Bos:2017:TPA**

- [257] L. Bos, S. De Marchi, and M. Vianello. Trivariate polynomial approximation on Lissajous curves. *IMA Journal*

of *Numerical Analysis*, 37(1):519–541, January 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/1/519/2669953/Trivariate-polynomial-approximation-on-Lissajous>.

**Bou-Rabee:2013:NMM**

- [258] N. Bou-Rabee and M. Hairer. Nonasymptotic mixing of the MALA algorithm. *IMA Journal of Numerical Analysis*, 33(1):80–110, January 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/1/80.full.pdf+html>.

**Bou-Rabee:2009:SVI**

- [259] Nawaf Bou-Rabee and Houman Owhadi. Stochastic variational integrators. *IMA Journal of Numerical Analysis*, 29(2):421–443, April 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/2/421>; <http://imajna.oxfordjournals.org/cgi/reprint/29/2/421>.

**Boubendir:2013:WNE**

- [260] Yassine Boubendir and Catalin Turc. Wave-number estimates for regularized combined field boundary integral operators in acoustic scattering problems with Neumann boundary conditions. *IMA Journal of Numerical Analysis*, 33(4):1176–1225, October 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/4/1176.full.pdf+html>.

[oxfordjournals.org/content/33/4/1176.full.pdf+html](http://imajna.oxfordjournals.org/content/33/4/1176.full.pdf+html).

**Boubendir:2016:HON**

- [261] Yassine Boubendir, Catalin Turc, and Víctor Domínguez. High-order Nyström discretizations for the solution of integral equation formulations of two-dimensional Helmholtz transmission problems. *IMA Journal of Numerical Analysis*, 36(1):463–492, January 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/1/463>.

**Bouche:2015:CCD**

- [262] Daniel Bouche, Francis Collino, Yoann Morel, and Olivier Vacus. Characteristic current decomposition and radar cross-section analysis for perfectly electrically conducting bodies. *IMA Journal of Numerical Analysis*, 35(1):454–477, January 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/1/454>.

**Bouchut:2014:CTV**

- [263] François Bouchut, David Doyen, and Robert Eymard. Convection and total variation flow. *IMA Journal of Numerical Analysis*, 34(3):1037–1071, July 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/3/1037>.

**Bouchut:2017:CTV**

- [264] François Bouchut, David Doyen, and Robert Eymard. Convection and to-

tal variation flow-erratum and improvement. *IMA Journal of Numerical Analysis*, 37(4):2139–2169, October 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/2139/3038028>.

**Bouharguane:2018:SMD**

- [265] Afaf Bouharguane and Benjamin Melinand. A splitting method for deep water with bathymetry. *IMA Journal of Numerical Analysis*, 38(3):1324–1350, July 17, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/3/1324/4056072>.

**Boulmezaoud:2005:MSE**

- [266] Tahar Z. Boulmezaoud and Mohammed El Rhabi. A mortar spectral element method for 3D Maxwell’s equations. *IMA Journal of Numerical Analysis*, 25(3):577–610, July 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/25/3/577>; <http://imanum.oxfordjournals.org/cgi/reprint/25/3/577>.

**Boulton:2007:NVA**

- [267] Lyonell Boulton. Non-variational approximation of discrete eigenvalues of self-adjoint operators. *IMA Journal of Numerical Analysis*, 27(1):102–121, January 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/1/102>; <http://imajna.oxfordjournals.org/cgi/reprint/27/1/102>.

[imajna.oxfordjournals.org/cgi/reprint/27/1/102](http://imajna.oxfordjournals.org/cgi/reprint/27/1/102).

**Boulton:2016:CQM**

- [268] Lyonell Boulton and Aatef Hobiny. On the convergence of the quadratic method. *IMA Journal of Numerical Analysis*, 36(3):1310–1333, July 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/3/1310>.

**Boumal:2019:GRC**

- [269] Nicolas Boumal, P-A Absil, and Coralia Cartis. Global rates of convergence for nonconvex optimization on manifolds. *IMA Journal of Numerical Analysis*, 39(1):1–33, January 25, 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/1/1/4836777>.

**Boumenir:2001:CNE**

- [270] A. Boumenir and B. Chanane. The computation of negative eigenvalues of singular Sturm–Liouville problems. *IMA Journal of Numerical Analysis*, 21(2):489–501, April 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_02/210489.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_02/210489.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_02/pdf/210489.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_02/pdf/210489.pdf).

**Boutelje:2010:NSL**

- [271] B. R. Boutelje and A. T. Hill. Nonautonomous stability of linear multistep methods. *IMA Journal of Numerical Analysis*, 30(2):525–542, April 2010. CODEN IJNADH.

ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/2/525>; <http://imajna.oxfordjournals.org/cgi/reprint/30/2/525>.

**Boyer:2012:AUF**

- [272] Franck Boyer. Analysis of the upwind finite volume method for general initial- and boundary-value transport problems. *IMA Journal of Numerical Analysis*, 32(4):1404–1439, October 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/4/1404.full.pdf+html>.

**Boyer:2010:NSA**

- [273] Franck Boyer, Florence Hubert, and Stella Krell. Nonoverlapping Schwarz algorithm for solving two-dimensional m-DDFV schemes. *IMA Journal of Numerical Analysis*, 30(4):1062–1100, October 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/30/4/1062.full.pdf+html>.

**Bozzini:2015:IVS**

- [274] Mira Bozzini, Licia Lenarduzzi, Milvia Rossini, and Robert Schaback. Interpolation with variably scaled kernels. *IMA Journal of Numerical Analysis*, 35(1):199–219, January 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/1/199>.

**Bradji:2007:ODC**

- [275] Abdallah Bradji and Ahmed-Salah Chibi. Optimal defect corrections on composite nonmatching finite-element meshes. *IMA Journal of Numerical Analysis*, 27(4):765–780, October 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/4/765>; <http://imajna.oxfordjournals.org/cgi/reprint/27/4/765>.

**Bradji:2008:DCH**

- [276] Abdallah Bradji and Raphaële Herbin. Discretization of coupled heat and electrical diffusion problems by finite-element and finite-volume methods. *IMA Journal of Numerical Analysis*, 28(3):469–495, July 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/3/469>; <http://imajna.oxfordjournals.org/cgi/reprint/28/3/469>.

**Braess:1986:NSB**

- [277] D. Braess and P. Peisker. On the numerical solution of the biharmonic equation and the role of squaring matrices for preconditioning. *IMA Journal of Numerical Analysis*, 6(4):393–404, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Braess:1983:NSO**

- [278] Dietrich Braess. On the numerical solution of the one-dimensional Stefan problem by Newton’s method. *IMA Journal of Numerical Analysis*, 3(2):

161–172, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Braess:2005:AXE**

- [279] Dietrich Braess and Wolfgang Hackbusch. Approximation of  $1/x$  by exponential sums in  $[1, \infty)$ . *IMA Journal of Numerical Analysis*, 25(4):685–697, October 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/reprint/25/4/685>.

**Brandts:2006:NLS**

- [280] Jan Brandts, Yanping Chen, and Julie Yang. A note on least-squares mixed finite elements in relation to standard and mixed finite elements. *IMA Journal of Numerical Analysis*, 26(4):779–789, October 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/26/4/779>; <http://imajna.oxfordjournals.org/cgi/reprint/26/4/779>.

**Brandts:2003:GSU**

- [281] Jan Brandts and Michal Křížek. Gradient superconvergence on uniform simplicial partitions of polytopes. *IMA Journal of Numerical Analysis*, 23(3):489–505, July 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_03/230489.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_03/230489.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_03/pdf/230489.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_03/pdf/230489.pdf).

**Brankin:1989:SPL**

- [282] R. W. Brankin and I. Gladwell. Shape-preserving local interpolation for plotting solutions of ODEs. *IMA Journal of Numerical Analysis*, 9(4):555–566, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Brannigan:1981:TCB**

- [283] M. Brannigan. Theory and computation of best strict constrained Chebyshev approximation of discrete data. *IMA Journal of Numerical Analysis*, 1(2):169–184, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Brass:1990:OER**

- [284] H. Brass. Optimal estimation rules for functions of high smoothness. *IMA Journal of Numerical Analysis*, 10(1):129–136, January 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Breda:2012:CEG**

- [285] Dimitri Breda, Rossana Vermiglio, and Stefano Maset. Computing the eigenvalues of Gurtin–MacCamy models with diffusion. *IMA Journal of Numerical Analysis*, 32(3):1030–1050, July 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/3/1030.full.pdf+html>.

**Breda:2004:CCR**

- [286] Journal D. Breda, S. Maset, and R. Vermiglio. Computing the characteristic roots for delay differential equations. *IMA Journal of Nu-*

*merical Analysis*, 24(1):1–19, January 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_01/240001.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_01/240001.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_01/pdf/240001.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_01/pdf/240001.pdf).

**Brehier:2017:AIL**

- [287] Charles-Edouard Bréhier and Marie Kopec. Approximation of the invariant law of SPDEs: error analysis using a Poisson equation for a full-discretization scheme. *IMA Journal of Numerical Analysis*, 37(3):1375–1410, July 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/3/1375/2669999/Approximation-of-the-invariant-law-of-SPDEs-error>.

**Brenner:2014:PEA**

- [288] Andreas Brenner, Eberhard Bänsch, and Markus Bause. A priori error analysis for finite element approximations of the Stokes problem on dynamic meshes. *IMA Journal of Numerical Analysis*, 34(1):123–146, January 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/1/123.full.pdf+html>.

**Brenner:2017:GDH**

- [289] K. Brenner, J. Hennicker, R. Masson, and P. Samier. Gradient discretization of hybrid-dimensional Darcy flow in fractured porous media with discontinuous pressures at matrix-fracture interfaces. *IMA Jour-*

*nal of Numerical Analysis*, 37(3):1551–1585, July 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/3/1551/2670042/Gradient-discretization-of-hybrid-dimensional>.

**Brenner:2010:PEE**

- [290] Susanne C. Brenner, Thirupathi Gudi, and Li yeng Sung. An a posteriori error estimator for a quadratic  $C^0$ -interior penalty method for the biharmonic problem. *IMA Journal of Numerical Analysis*, 30(3):777–798, July 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/3/777>; <http://imajna.oxfordjournals.org/cgi/reprint/30/3/777>.

**Bressan:2011:IRD**

- [291] Andrea Bressan. Isogeometric regular discretization for the Stokes problem. *IMA Journal of Numerical Analysis*, 31(4):1334–1356, October 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/4/1334.full.pdf+html>.

**Bressan:2018:ISS**

- [292] Andrea Bressan and Bert Jüttler. Inf-sup stability of isogeometric Taylor–Hood and sub-grid methods for the Stokes problem with hierarchical splines. *IMA Journal of Numerical Analysis*, 38(2):955–975, April 18, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (elec-



tronic). URL <http://academic.oup.com/imajna/article/38/2/955/4099778>.

**Bressan:2013:IDS**

- [293] Andrea Bressan and Giancarlo Sangalli. Isogeometric discretizations of the Stokes problem: stability analysis by the macroelement technique. *IMA Journal of Numerical Analysis*, 33(2):629–651, April 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/2/629.full.pdf+html>.

**Brett:2016:OCE**

- [294] Charles Brett, Andreas Dedner, and Charles Elliott. Optimal control of elliptic PDEs at points. *IMA Journal of Numerical Analysis*, 36(3):1015–1050, July 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/3/1015>.

**Brezinski:1983:ECC**

- [295] Claude Brezinski. Error control in convergence acceleration processes. *IMA Journal of Numerical Analysis*, 3(1):65–80, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Briggs:2002:FDA**

- [296] A. J. Briggs, J. R. Claisse, and C. M. Elliott. Finite-difference approximation of a one-dimensional Hamilton–Jacobi/elliptic system arising in superconductivity. *IMA Journal of Numerical Analysis*, 22(1):89–

131, January 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_01/220089.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_01/220089.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_01/pdf/220089.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_01/pdf/220089.pdf).

**Brink:1996:CRC**

- [297] Ulrich Brink and Ernst P. Stephan. Convergence rates for the coupling of FEM and collocation BEM. *IMA Journal of Numerical Analysis*, 16(1):93–110, January 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_16/Issue\\_01/160093.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_01/160093.sgm.abs.html).

**Brix:2015:MPD**

- [298] Kolja Brix, Martin Campos Pinto, Claudio Canuto, and Wolfgang Dahmen. Multilevel preconditioning of discontinuous Galerkin spectral element methods. Part I: geometrically conforming meshes. *IMA Journal of Numerical Analysis*, 35(4):1487–1532, October 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/4/1487>.

**Broersen:2015:PGD**

- [299] Dirk Broersen and Rob P. Stevenson. A Petrov–Galerkin discretization with optimal test space of a mild-weak formulation of convection-diffusion equations in mixed form. *IMA Journal of Numerical Analysis*, 35(1):39–73, January 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/1/39>.

oxfordjournals.org/content/35/1/39.

**Brown:2004:SIS**

- [300] Journal B. M. Brown and M. Marletta. Spectral inclusion and spectral exactness for PDEs on exterior domains. *IMA Journal of Numerical Analysis*, 24(1):21–43, January 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_01/240021.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_01/240021.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_01/pdf/240021.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_01/pdf/240021.pdf).

**Brown:1982:VII**

- [301] N. G. Brown and R. Wait. Verification and inversion of isoparametric transformations. *IMA Journal of Numerical Analysis*, 2(4):481–492, October 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Browne:1982:NTM**

- [302] Patrick J. Browne and B. D. Sleeman. A numerical technique for multiparameter eigenvalue problems. *IMA Journal of Numerical Analysis*, 2(4):451–457, October 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Brownlee:2004:AOI**

- [303] Rob Brownlee and Will Light. Approximation orders for interpolation by surface splines to rough functions. *IMA Journal of Numerical Analysis*, 24(2):179–192, April 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_02/240179.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_02/240179.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_02/pdf/240179.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_02/pdf/240179.pdf).

[//www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_02/pdf/240179.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_02/pdf/240179.pdf).

**Brumm:2014:HMM**

- [304] Bernd Brumm and Daniel Weiss. Heterogeneous multiscale methods for highly oscillatory mechanical systems with solution-dependent frequencies. *IMA Journal of Numerical Analysis*, 34(1):55–82, January 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/1/55.full.pdf+html>.

**Brunner:1989:NST**

- [305] H. Brunner and J.-P. Kauthen. The numerical solution of two-dimensional Volterra integral equations by collocation and iterated collocation. *IMA Journal of Numerical Analysis*, 9(1):47–59, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Brunner:1986:PSC**

- [306] Hermann Brunner. Polynomial spline collocation methods for Volterra integrodifferential equations with weakly singular kernels. *IMA Journal of Numerical Analysis*, 6(2):221–239, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Brunner:2009:DGA**

- [307] Hermann Brunner, Penny J. Davies, and Dugald B. Duncan. Discontinuous Galerkin approximations for Volterra integral equations of the first kind. *IMA Journal of Numerical Analysis*, 29(4):856–881, October 2009. CODEN IJNADH.

ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/4/856>; <http://imajna.oxfordjournals.org/cgi/reprint/29/4/856>.

**Brunner:2012:GCL**

- [308] Hermann Brunner, Penny J. Davies, and Dugald B. Duncan. Global convergence and local superconvergence of first-kind Volterra integral equation approximations. *IMA Journal of Numerical Analysis*, 32(3):1117–1146, July 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/3/1117.full.pdf+html>.

**Brunner:2001:GMC**

- [309] Hermann Brunner, Qiya Hu, and Qun Lin. Geometric meshes in collocation methods for Volterra integral equations with proportional delays. *IMA Journal of Numerical Analysis*, 21(4):783–798, October 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_04/210783.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_04/210783.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_04/pdf/210783.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_04/pdf/210783.pdf).

**Brunner:2010:SPC**

- [310] Hermann Brunner, Arieh Iserles, and Syvert P. Nørsett. The spectral problem for a class of highly oscillatory Fredholm integral operators. *IMA Journal of Numerical Analysis*, 30(1):108–130, January 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642

(electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/1/108>; <http://imajna.oxfordjournals.org/cgi/reprint/30/1/108>.

**Brunner:2011:ACS**

- [311] Hermann Brunner, Hehu Xie, and Ran Zhang. Analysis of collocation solutions for a class of functional equations with vanishing delays. *IMA Journal of Numerical Analysis*, 31(2):698–718, April 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/2/698.full.pdf+html>.

**Brutman:1986:GAP**

- [312] L. Brutman. Generalized alternating polynomials, some properties and numerical applications. *IMA Journal of Numerical Analysis*, 6(2):125–136, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Brutman:1990:IPA**

- [313] L. Brutman, P. Vértési, and Y. Xu. Interpolation by polynomials in  $z$  and  $z^{-1}$  on an annulus. *IMA Journal of Numerical Analysis*, 10(2):235–241, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Bryson:2005:SDC**

- [314] Steve Bryson, Alexander Kurganov, Doron Levy, and Guergana Petrova. Semi-discrete central-upwind schemes with reduced dissipation for Hamilton–Jacobi equations. *IMA Journal of Numerical Analysis*, 25(1):113–138, January 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642

(electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/25/1/113>; <http://imanum.oupjournals.org/cgi/reprint/25/1/113>.

**Buchholz:2018:CGB**

- [315] Simone Buchholz, Ludwig Gauckler, Volker Grimm, Marlis Hochbruck, and Tobias Jahnke. Closing the gap between trigonometric integrators and splitting methods for highly oscillatory differential equations. *IMA Journal of Numerical Analysis*, 38(1):57–74, January 25, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/1/57/3065608>.

**Buckwar:2005:WAS**

- [316] Evelyn Buckwar and Tony Shardlow. Weak approximation of stochastic differential delay equations. *IMA Journal of Numerical Analysis*, 25(1):57–86, January 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/25/1/57>; <http://imanum.oupjournals.org/cgi/reprint/25/1/57>.

**Buffa:2017:RSL**

- [317] Annalisa Buffa and Eduardo M. Garau. Refinable spaces and local approximation estimates for hierarchical splines. *IMA Journal of Numerical Analysis*, 37(3):1125–1149, July 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/3/1125/2670017/Refinable-spaces-and-local-approximation-estimates>

**Buffa:2009:CEB**

- Annalisa Buffa and Christoph Ortner. Compact embeddings of broken Sobolev spaces and applications. *IMA Journal of Numerical Analysis*, 29(4):827–855, October 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/4/827>; <http://imajna.oxfordjournals.org/cgi/reprint/29/4/827>.

**Buhmann:1988:CUQ**

- [319] M. D. Buhmann. Convergence of univariate quasi-interpolation using multiquadrics. *IMA Journal of Numerical Analysis*, 8(3):365–383, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Buhmann:1992:DDN**

- [320] M. D. Buhmann and A. Iserles. On the dynamics of a discretized neutral equation. *IMA Journal of Numerical Analysis*, 12(3):339–363, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). IMA Conference on Dynamics of Numerics and Numerics of Dynamics (Bristol, 1990).

**Buhmann:2010:NRB**

- [321] Martin D. Buhmann, Slawomir Dinew, and Elisabeth Larsson. A note on radial basis function interpolant limits. *IMA Journal of Numerical Analysis*, 30(2):543–554, April 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/>

abstract/30/2/543; <http://imajna.oxfordjournals.org/cgi/reprint/30/2/543>.

**Bujalska:1982:QS**

- [322] A. Bujalska and R. Smarzewski. Quadratic  $X$ -splines. *IMA Journal of Numerical Analysis*, 2(1):37–47, January 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Bujanda:2007:OCL**

- [323] B. Bujanda and J. C. Jorge. Order conditions for linearly implicit fractional step Runge–Kutta methods. *IMA Journal of Numerical Analysis*, 27(4):781–797, October 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/4/781>; <http://imajna.oxfordjournals.org/cgi/reprint/27/4/781>.

**Bultheel:2010:RQF**

- [324] A. Bultheel, P. González-Vera, E. Hendriksen, and O. Njåstad. Rational quadrature formulas on the unit circle with prescribed nodes and maximal domain of validity. *IMA Journal of Numerical Analysis*, 30(4):940–963, October 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/30/4/940.full.pdf+html>.

**Burke:2003:RSC**

- [325] J. V. Burke, A. S. Lewis, and M. L. Overton. Robust stability and a criss-cross algorithm for pseudospectra. *IMA*

*Journal of Numerical Analysis*, 23(3):359–375, July 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_03/drg004.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_03/drg004.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_03/pdf/drg004.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_03/pdf/drg004.pdf).

**Burke:2008:SSR**

- [326] J. V. Burke, A. S. Lewis, and M. L. Overton. The speed of Shor’s R-algorithm. *IMA Journal of Numerical Analysis*, 28(4):711–720, October 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/4/711>.

**Burman:2009:WEE**

- [327] Erik Burman, Johnny Guzmán, and Dmitriy Leykekhman. Weighted error estimates of the continuous interior penalty method for singularly perturbed problems. *IMA Journal of Numerical Analysis*, 29(2):284–314, April 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/2/284>; <http://imajna.oxfordjournals.org/cgi/reprint/29/2/284>.

**Burman:2018:RFE**

- [328] Erik Burman, Johnny Guzmán, Manuel A. Sánchez, and Marcus Sarkis. Robust flux error estimation of an unfitted Nitsche method for high-contrast interface problems. *IMA Journal of Numerical Analysis*, 38(2):646–668, April 18, 2018. CODEN IJNADH.

ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/2/646/3829613>.

**Burman:2010:IPS**

- [329] Erik Burman and Peter Hansbo. Interior-penalty-stabilized Lagrange multiplier methods for the finite-element solution of elliptic interface problems. *IMA Journal of Numerical Analysis*, 30(3):870–885, July 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/3/870>; <http://imajna.oxfordjournals.org/cgi/reprint/30/3/870>.

**Burman:2017:CDG**

- [330] Erik Burman, Peter Hansbo, Mats G. Larson, and André Massing. A cut discontinuous Galerkin method for the Laplace–Beltrami operator. *IMA Journal of Numerical Analysis*, 37(1):138–169, January 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/1/138/2884281/A-cut-discontinuous-Galerkin-method-for-the>.

**Burrage:1985:SPS**

- [331] K. Burrage and F. H. Chipman. The stability properties of singly-implicit general linear methods. *IMA Journal of Numerical Analysis*, 5(3):287–295, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Burrage:1987:ASG**

- [332] Kevin Burrage.  $(k, l)$ -algebraic stability of Gauss methods. *IMA Journal of Numerical Analysis*, 7(2):251–259, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Burrage:1988:ASR**

- [333] Kevin Burrage.  $(k, l)$ -algebraic stability of Runge–Kutta methods. *IMA Journal of Numerical Analysis*, 8(3):385–400, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Burrage:1988:OPI**

- [334] Kevin Burrage. Order properties of implicit multivalued methods for ordinary differential equations. *IMA Journal of Numerical Analysis*, 8(1):43–69, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Buscaglia:2012:IEF**

- [335] Gustavo C. Buscaglia and Abdelatif Agouzal. Interpolation estimate for a finite-element space with embedded discontinuities. *IMA Journal of Numerical Analysis*, 32(2):672–686, April 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/2/672.full.pdf+html>.

**Buscaglia:2015:FEM**

- [336] Gustavo C. Buscaglia and Vitoriano Ruas. Finite element methods for the Stokes system with interface pressure discontinuities. *IMA Journal of Numerical Analysis*, 35(1):220–238, January 2015. CODEN IJNADH.

ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/1/220>.

**Bustinza:2008:CLD**

- [337] Rommel Bustinza, Gabriel N. Gatica, and Francisco-Javier Sayas. On the coupling of local discontinuous Galerkin and boundary element methods for non-linear exterior transmission problems. *IMA Journal of Numerical Analysis*, 28(2):225–244, April 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/2/225>; <http://imajna.oxfordjournals.org/cgi/reprint/28/2/225>.

**Butcher:1986:OOS**

- [338] J. C. Butcher. Optimal order and step-size sequences. *IMA Journal of Numerical Analysis*, 6(4):433–438, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Butcher:2010:TBS**

- [339] J. C. Butcher. Trees, B-series and exponential integrators. *IMA Journal of Numerical Analysis*, 30(1):131–140, January 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/1/131>; <http://imajna.oxfordjournals.org/cgi/reprint/30/1/131>.

**Caceres:2017:MVE**

- [340] Ernesto Cáceres and Gabriel N. Gatica. A mixed virtual element method for

the pseudostress–velocity formulation of the Stokes problem. *IMA Journal of Numerical Analysis*, 37(1):296–331, January 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/1/296/2669934/A-mixed-virtual-element-method-for-the>.

**Cahlon:1992:NSF**

- [341] B. Cahlon and D. Schmidt. Numerical solutions for functional integral equations. *IMA Journal of Numerical Analysis*, 12(4):527–543, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Cahlon:1982:PPA**

- [342] Baruch Cahlon and Darrell Schmidt. Piecewise polynomial approximate solutions of an automatic control problem. *IMA Journal of Numerical Analysis*, 2(1):1–19, January 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Cai:1999:APD**

- [343] Xing Cai, Bjørn Fredrik Nielsen, and Aslak Tveito. An analysis of a preconditioner for the discretized pressure equation arising in reservoir simulation. *IMA Journal of Numerical Analysis*, 19(2):291–316, April 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_02/190291.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_02/190291.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_02/pdf/190291.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_02/pdf/190291.pdf).

**Caloz:1997:SAR**

- [344] Gabriel Caloz. Stability of the approximation of a regular solution branch.

*IMA Journal of Numerical Analysis*, 17(2):285–303, April 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_17/Issue\\_02/170285.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_02/170285.sgm.abs.html).

**Calvo:1996:GEE**

- [345] M. Calvo, D. J. Higham, J. I. Montijano, and L. Rández. Global error estimation with adaptive explicit Runge–Kutta methods. *IMA Journal of Numerical Analysis*, 16(1):47–63, January 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_16/Issue\\_01/160047.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_01/160047.sgm.abs.html).

**Calvo:2002:HOS**

- [346] M. P. Calvo. High order starting iterates for implicit Runge–Kutta methods: an improvement for variable-step symplectic integrators. *IMA Journal of Numerical Analysis*, 22(1):153–166, January 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_01/220153.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_01/220153.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_01/pdf/220153.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_01/pdf/220153.pdf).

**Calvo:1999:CMT**

- [347] M. P. Calvo, A. Iserles, and A. Zanna. Conservative methods for the Toda lattice equations. *IMA Journal of Numerical Analysis*, 19(4):509–523, October 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_04/190509.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_04/190509.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_04/pdf/190509.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_04/pdf/190509.pdf).

[//www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_04/pdf/190509.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_04/pdf/190509.pdf).

**Camacho:2015:PPE**

- [348] Fernando Camacho and Alan Demlow.  $L_2$  and pointwise a posteriori error estimates for FEM for elliptic PDEs on surfaces. *IMA Journal of Numerical Analysis*, 35(3):1199–1227, July 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/3/1199>.

**Camano:2018:EAA**

- [349] Jessika Camaño, Ricardo Oyarzúa, Ricardo Ruiz-Baier, and Giordano Tierra. Error analysis of an augmented mixed method for the Navier–Stokes problem with mixed boundary conditions. *IMA Journal of Numerical Analysis*, 38(3):1452–1484, July 17, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/3/1452/4082917>.

**Cameron:1983:SDA**

- [350] Ian T. Cameron. Solution of differential-algebraic systems using diagonally implicit Runge–Kutta methods. *IMA Journal of Numerical Analysis*, 3(3):273–289, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Cameron:1985:API**

- [351] R. F. Cameron and S. McKee. The analysis of product integration methods for Abel’s equation using discrete fractional differentiation. *IMA Journal of Numerical Analysis*, 5(3):339–353,



1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Campos:2011:QFI**

- [352] Rafael G. Campos, Francisco Domínguez Mota, and E. Coronado. Quadrature formulas for integral transforms generated by orthogonal polynomials. *IMA Journal of Numerical Analysis*, 31(3):1181–1193, July 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/3/1181.full.pdf+html>.

**Cances:2018:TGM**

- [353] Eric Cancès, Rachida Chakir, Lianhua He, and Yvon Maday. Two-grid methods for a class of nonlinear elliptic eigenvalue problems. *IMA Journal of Numerical Analysis*, 38(2):605–645, April 18, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/2/605/3866674>.

**Cangiani:2014:ADG**

- [354] Andrea Cangiani, Emmanuel H. Georgoulis, and Stephen Metcalfe. Adaptive discontinuous Galerkin methods for nonstationary convection-diffusion problems. *IMA Journal of Numerical Analysis*, 34(4):1578–1597, October 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/4/1578>.

**Cangiani:2017:CNV**

- [355] Andrea Cangiani, Gianmarco Manzini, and Oliver J. Sutton. Conforming

and nonconforming virtual element methods for elliptic problems. *IMA Journal of Numerical Analysis*, 37(3):1317–1354, July 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/3/1317/2670019/Conforming-and-nonconforming-virtual-element>.

**Cano:2010:MCM**

- [356] B. Cano and M. J. Moreta. Multi-step cosine methods for second-order partial differential systems. *IMA Journal of Numerical Analysis*, 30(2):431–461, April 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/2/431>; <http://imajna.oxfordjournals.org/cgi/reprint/30/2/431>.

**Cano:1998:EGN**

- [357] B. Cano and J. M. Sanz-Serna. Error growth in the numerical integration of periodic orbits by multistep methods, with application to reversible systems. *IMA Journal of Numerical Analysis*, 18(1):57–75, January 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_01/180057.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_01/180057.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_01/pdf/180057.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_01/pdf/180057.pdf).

**Canuto:2014:BPC**

- [358] Claudio Canuto, Luca F. Pavarino, and Alexandre B. Pieri. BDDC preconditioners for continuous and discontinuous Galerkin methods using spectral/*hp* elements with variable lo-

cal polynomial degree. *IMA Journal of Numerical Analysis*, 34(3):879–903, July 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/3/879>.

**Cao:1997:HBM**

- [359] Thang Cao. Hierarchical basis methods for hypersingular integral equations. *IMA Journal of Numerical Analysis*, 17(4):603–619, October 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_17/Issue\\_04/170603.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_04/170603.sgm.abs.html).

**Cao:2019:CMF**

- [360] X. Cao, S. F. Nemaadjieu, and I. S. Pop. Convergence of an MPFA finite volume scheme for a two-phase porous media flow model with dynamic capillarity. *IMA Journal of Numerical Analysis*, 39(1):512–544, January 25, 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/1/512/4826975>.

**Cao:2018:FEA**

- [361] Yanzhao Cao, Jialin Hong, and Zhihui Liu. Finite element approximations for second-order stochastic differential equation driven by fractional Brownian motion. *IMA Journal of Numerical Analysis*, 38(1):184–197, January 25, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/1/184/3062450>.

**Cardenal:1998:SSQ**

- [362] Jesús Cardenal, Iain S. Duff, and José M. Jiménez. Solution of sparse quasi-square rectangular systems by Gaussian elimination. *IMA Journal of Numerical Analysis*, 18(2):165–177, April 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_02/180165.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_02/180165.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_02/pdf/180165.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_02/pdf/180165.pdf).

**Carr:1995:NAM**

- [363] J. Carr, D. B. Duncan, and C. H. Walshaw. Numerical approximation of a metastable system. *IMA Journal of Numerical Analysis*, 15(4):505–521, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Carstensen:2016:BAE**

- [364] C. Carstensen, D. Gallistl, and M. Schedensack.  $L^2$  best approximation of the elastic stress in the Arnold–Winther FEM. *IMA Journal of Numerical Analysis*, 36(3):1096–1119, July 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/3/1096>.

**Carstensen:2017:NFO**

- [365] C. Carstensen and K. Köhler. Non-conforming FEM for the obstacle problem. *IMA Journal of Numerical Analysis*, 37(1):64–93, January 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/1/64/2669937/>

Nonconforming-FEM-for-the-obstacle-  
problem.

**Carstensen:2015:MAC**

- [366] C. Carstensen and M. Schedensack. Medius analysis and comparison results for first-order finite element methods in linear elasticity. *IMA Journal of Numerical Analysis*, 35(4):1591–1621, October 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/4/1591>.

**Carstensen:2008:CAF**

- [367] Carsten Carstensen. Convergence of an adaptive FEM for a class of degenerate convex minimization problems. *IMA Journal of Numerical Analysis*, 28(3):423–439, July 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/3/423>; <http://imajna.oxfordjournals.org/cgi/reprint/28/3/423>.

**Carstensen:2000:CMF**

- [368] Carsten Carstensen and Stefan A. Funken. Coupling of mixed finite elements and boundary elements. *IMA Journal of Numerical Analysis*, 20(3):461–480, July 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_03/200461.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_03/200461.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_03/pdf/200461.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_03/pdf/200461.pdf).

**Carstensen:2019:PPE**

- [369] Carsten Carstensen, Gouranga Mallik, and Neela Nataraj. A priori and a

posteriori error control of discontinuous Galerkin finite element methods for the von Kármán equations. *IMA Journal of Numerical Analysis*, 39(1):167–200, January 25, 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/1/167/4904161>.

**Carstensen:2016:CRU**

- [370] Carsten Carstensen, Neela Nataraj, and Amiya K. Pani. Comparison results and unified analysis for first-order finite volume element methods for a Poisson model problem. *IMA Journal of Numerical Analysis*, 36(3):1120–1142, July 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/3/1120>.

**Carstensen:1997:SBE**

- [371] Carsten Carstensen and Peter Wriggers. On the symmetric boundary element method and the symmetric coupling of boundary elements and finite elements. *IMA Journal of Numerical Analysis*, 17(2):201–238, April 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_17/Issue\\_02/170201.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_02/170201.sgm.abs.html).

**Carter:2007:SEE**

- [372] Rebecca Carter and Michael B. Giles. Sharp error estimates for discretizations of the 1D convection–diffusion equation with Dirac initial data. *IMA Journal of Numerical Analysis*, 27(2):406–425, April 2007. CODEN IJNADH. ISSN

0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/2/406>; <http://imajna.oxfordjournals.org/cgi/reprint/27/2/406>.

**Cartis:2012:ACR**

- [373] C. Cartis, N. I. M. Gould, and Ph. L. Toint. An adaptive cubic regularization algorithm for nonconvex optimization with convex constraints and its function-evaluation complexity. *IMA Journal of Numerical Analysis*, 32(4):1662–1695, October 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/4/1662.full.pdf+html>.

**Carvalhaes:2013:SIN**

- [374] Claudio G. Carvalhaes. Spline interpolation on nonunisolvent sets. *IMA Journal of Numerical Analysis*, 33(1):370–375, January 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/1/370.full.pdf+html>.

**Cascon:2012:QCA**

- [375] J. Manuel Cascón and Ricardo H. Nochetto. Quasioptimal cardinality of Afem driven by nonresidual estimators. *IMA Journal of Numerical Analysis*, 32(1):1–29, January 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/1/1.full.pdf+html>.

**Cash:1982:MIR**

- [376] J. R. Cash and A. Singhal. Monimplicit Runge–Kutta formulae for the numerical integration of stiff differential systems. *IMA Journal of Numerical Analysis*, 2(2):211–227, April 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Castro:2008:NAB**

- [377] Carlos Castro, Sorin Micu, and Arnaud Münch. Numerical approximation of the boundary control for the wave equation with mixed finite elements in a square. *IMA Journal of Numerical Analysis*, 28(1):186–214, January 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/1/186>; <http://imajna.oxfordjournals.org/cgi/reprint/28/1/186>.

**Caucao:2016:PPE**

- [378] Sergio Caucao, David Mora, and Ricardo Oyarzúa. A priori and a posteriori error analysis of a pseudostress-based mixed formulation of the Stokes problem with varying density. *IMA Journal of Numerical Analysis*, 36(2):947–983, April 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/2/947>.

**Caussignac:1988:LCN**

- [379] Ph. Caussignac and R. Touzani. Linear conforming and nonconforming upwind finite elements for the convection-diffusion equation. *IMA Journal of*

*Numerical Analysis*, 8(1):85–103, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Cautres:2004:LDD**

- [380] René Cautrès, Raphaële Herbin, and Florence Hubert. The Lions domain decomposition algorithm on non-matching cell-centred finite volume meshes. *IMA Journal of Numerical Analysis*, 24(3):465–490, July 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_03/240465.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_03/240465.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_03/pdf/240465.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_03/pdf/240465.pdf).

**Cazenave:1998:IFD**

- [381] Thierry Cazenave and Flávio Dickstein. Implicit finite difference schemes for a linear model of well-reservoir coupling. *IMA Journal of Numerical Analysis*, 18(1):91–120, January 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_01/180091.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_01/180091.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_01/pdf/180091.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_01/pdf/180091.pdf).

**Celis:2018:PBA**

- [382] Oliver Salazar Celis. A parametrized barycentric approximation for inverse problems with application to the Black–Scholes formula. *IMA Journal of Numerical Analysis*, 38(2):976–997, April 18, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/2/976/3836903>.

[oup.com/imajna/article/38/2/976/3836903](http://academic.oup.com/imajna/article/38/2/976/3836903).

**Celledoni:2001:MAM**

- [383] Elena Celledoni and Arieh Iserles. Methods for the approximation of the matrix exponential in a Lie-algebraic setting. *IMA Journal of Numerical Analysis*, 21(2):463–488, April 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_02/210463abs.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_02/210463abs.pdf); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_02/pdf/210463.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_02/pdf/210463.pdf).

**Cermak:2011:SAP**

- [384] Jan Cermák. The stability and asymptotic properties of the  $\Theta$ -methods for the pantograph equation. *IMA Journal of Numerical Analysis*, 31(4):1533–1551, October 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/4/1533.full.pdf+html>.

**Chadha:2011:RGE**

- [385] Naresh M. Chadha and Natalia Kopteva. A robust grid equidistribution method for a one-dimensional singularly perturbed semilinear reaction–diffusion problem. *IMA Journal of Numerical Analysis*, 31(1):188–211, January 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/1/188.full.pdf+html>.

**Chainais-Hillairet:2011:FVS**

- [386] Claire Chainais-Hillairet and Jérôme Droniou. Finite-volume schemes for

noncoercive elliptic problems with Neumann boundary conditions. *IMA Journal of Numerical Analysis*, 31(1):61–85, January 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/1/61.full.pdf+html>.

**Chainais-Hillairet:2007:ABF**

- [387] Claire Chainais-Hillairet and Francis Filbet. Asymptotic behaviour of a finite-volume scheme for the transient drift-diffusion model. *IMA Journal of Numerical Analysis*, 27(4):689–716, October 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/4/689>; <http://imajna.oxfordjournals.org/cgi/reprint/27/4/689>.

**Chainais-Hillairet:2003:CFV**

- [388] Claire Chainais-Hillairet and Yue-Jun Peng. Convergence of a finite-volume scheme for the drift-diffusion equations in 1D. *IMA Journal of Numerical Analysis*, 23(1):81–108, January 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_01/230081.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_01/230081.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_01/pdf/230081.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_01/pdf/230081.pdf).

**Chalabi:1992:SUS**

- [389] A. Chalabi. Stable upwind schemes for hyperbolic conservation laws with source terms. *IMA Journal of Numerical Analysis*, 12(2):217–241, 1992.

CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Challis:1982:NMC**

- [390] N. V. Challis and D. M. Burley. A numerical method for conformal mapping. *IMA Journal of Numerical Analysis*, 2(2):169–181, April 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Chamberlain:1988:FLL**

- [391] R. M. Chamberlain and M. J. D. Powell. *QR* factorization for linear least-squares problems on a hypercube multiprocessor. *IMA Journal of Numerical Analysis*, 8(4):401–413, October 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Chan:1991:TPT**

- [392] Raymond H. Chan. Toeplitz preconditioners for Toeplitz systems with non-negative generating functions. *IMA Journal of Numerical Analysis*, 11(3):333–345, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Chan:2001:FM**

- [393] Raymond H. Chan, Michael K. Ng, and Xiao-Qing Jin. Strang-type preconditioners for systems of L.M.F.-based O.D.E. codes. *IMA Journal of Numerical Analysis*, 21(2):451–462, April 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_02/210451.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_02/210451.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_02/pdf/210451.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_02/pdf/210451.pdf).

**Chandler:1987:UCG**

- [394] G. A. Chandler and I. G. Graham. Uniform convergence of Galerkin solutions to noncompact integral operator equations. *IMA Journal of Numerical Analysis*, 7(3):327–334, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Chandler-Wilde:1993:SUS**

- [395] S. N. Chandler-Wilde. Some uniform stability and convergence results for integral equations on the real line and projection methods for their solution. *IMA Journal of Numerical Analysis*, 13(4):509–535, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Chandler-Wilde:1989:AGT**

- [396] S. N. Chandler-Wilde and M. J. C. Gover. On the application of a generalization of Toeplitz matrices to the numerical solution of integral equations with weakly singular convolution kernels. *IMA Journal of Numerical Analysis*, 9(4):525–544, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Chang:1996:NPA**

- [397] Xiao-Wen Chang, Christopher C. Paige, and G. W. Stewart. New perturbation analyses for the Cholesky factorization. *IMA Journal of Numerical Analysis*, 16(4):457–484, October 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_16/Issue\\_04/160457.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_04/160457.sgm.abs.html).

**Chapko:2000:NSH**

- [398] Roman Chapko, Rainer Kress, and Lars Monch. On the numerical solution of a hypersingular integral equation for elastic scattering from a planar crack. *IMA Journal of Numerical Analysis*, 20(4):601–619, October 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_04/200601.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_04/200601.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_04/pdf/200601.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_04/pdf/200601.pdf).

**Chappell:2011:CQG**

- [399] David J. Chappell. Convolution quadrature Galerkin boundary element method for the wave equation with reduced quadrature weight computation. *IMA Journal of Numerical Analysis*, 31(2):640–666, April 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/2/640.full.pdf+html>.

**Charbonneau:2010:WCP**

- [400] Benoit Charbonneau, Yuriy Svyrydov, and P. F. Tupper. Weak convergence in the Prokhorov metric of methods for stochastic differential equations. *IMA Journal of Numerical Analysis*, 30(2):579–594, April 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/2/579>; <http://imajna.oxfordjournals.org/cgi/reprint/30/2/579>.

**Chartier:2007:PFI**

- [401] Philippe Chartier and Ander Murua. Preserving first integrals and volume forms of additively split systems. *IMA Journal of Numerical Analysis*, 27(2):381–405, April 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/2/381>; <http://imajna.oxfordjournals.org/cgi/reprint/27/2/381>.

**Chau:2018:WBS**

- [402] Ki Wai Chau and Cornelis W. Oosterlee. On the wavelet-based SWIFT method for backward stochastic differential equations. *IMA Journal of Numerical Analysis*, 38(2):1051–1083, April 18, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/2/1051/3947812>.

**Chavez:2012:DDS**

- [403] Joseph Páez Chávez. Discretizing dynamical systems with Hopf–Hopf bifurcations. *IMA Journal of Numerical Analysis*, 32(1):185–201, January 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/1/185.full.pdf+html>.

**Chawla:1983:NFO**

- [404] M. M. Chawla. A new fourth-order finite-difference method for computing eigenvalues of fourth-order two-point boundary value problems. *IMA Journal of Numerical Analysis*, 3(3):291–

293, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Chawla:1984:FDM**

- [405] M. M. Chawla and C. P. Katti. A finite-difference method for a class of singular two-point boundary value problems. *IMA Journal of Numerical Analysis*, 4(4):457–466, October 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Chawla:1985:HAS**

- [406] M. M. Chawla and P. S. Rao. High-accuracy  $P$ -stable methods for  $y'' = f(t, y)$ . *IMA Journal of Numerical Analysis*, 5(2):215–220, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). See corrigendum [407].

**Chawla:1986:CHA**

- [407] M. M. Chawla and P. S. Rao. Corrigendum: “High-accuracy  $P$ -stable methods for  $y'' = f(t, y)$ ” [IMA J. Numer. Anal. **5** (1985), no. 2, 215–220; MR 87c:65078]. *IMA Journal of Numerical Analysis*, 6(2):252, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). See [406].

**Chegini:2012:ATP**

- [408] Nabi Chegini and Rob Stevenson. The adaptive tensor product wavelet scheme: sparse matrices and the application to singularly perturbed problems. *IMA Journal of Numerical Analysis*, 32(1):75–104, January 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/1/75.full.pdf+html>.



oxfordjournals.org/content/32/1/75.full.pdf+html.

**Chen:2012:MCA**

- [409] Caihua Chen, Bingsheng He, and Xiaoming Yuan. Matrix completion via an alternating direction method. *IMA Journal of Numerical Analysis*, 32(1):227–245, January 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/1/227.full.pdf+html>.

**Chen:1989:EEO**

- [410] Chuan Miao Chen, Stig Larsson, and Nai Ying Zhang. Error estimates of optimal order for finite element methods with interpolated coefficients for the nonlinear heat equation. *IMA Journal of Numerical Analysis*, 9(4):507–524, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Chen:2017:MSC**

- [411] Chuchu Chen, Jialin Hong, and Lihai Ji. Mean-square convergence of a symplectic local discontinuous Galerkin method applied to stochastic linear Schrödinger equation. *IMA Journal of Numerical Analysis*, 37(2):1041–1065, April 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/2/1041/2669981/Mean-square-convergence-of-a-symplectic-local>.

**Chen:2017:LFE**

- [412] Hongtao Chen, Hailong Guo, Zhimin Zhang, and Qingsong Zou. A  $C^0$

linear finite element method for two fourth-order eigenvalue problems. *IMA Journal of Numerical Analysis*, 37(4):2120–2138, October 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/2120/2422320>.

**Chen:2016:RPE**

- [413] Huangxin Chen, Jingzhi Li, and Weifeng Qiu. Robust a posteriori error estimates for HDG method for convection-diffusion equations. *IMA Journal of Numerical Analysis*, 36(1):437–462, January 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/1/437>.

**Chen:2011:NSC**

- [414] Jinhai Chen and Matthias Gerdt. Numerical solution of control-state constrained optimal control problems with an inexact smoothing Newton method. *IMA Journal of Numerical Analysis*, 31(4):1598–1624, October 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/4/1598.full.pdf+html>.

**Chen:2004:AIQ**

- [415] Journal Shaochun Chen, Dongyang Shi, and Yongcheng Zhao. Anisotropic interpolation and quasi-Wilson element for narrow quadrilateral meshes. *IMA Journal of Numerical Analysis*, 24(1):77–95, January 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://www3>.

oup.co.uk/imanum/hdb/Volume\_24/Issue\_01/240077.sgm.abs.html; [http://www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_01/pdf/240077.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_01/pdf/240077.pdf).

**Chen:1993:NAB**

- [416] Ke Chen and S. Amini. Numerical analysis of boundary integral solution of the Helmholtz equation in domains with nonsmooth boundaries. *IMA Journal of Numerical Analysis*, 13(1):43–66, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Chen:2006:TLS**

- [417] Ke Chen and Martyn D. Hughes. A two-level sparse approximate inverse preconditioner for unsymmetric matrices. *IMA Journal of Numerical Analysis*, 26(1):11–24, January 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/26/1/11>; <http://imanum.oxfordjournals.org/cgi/reprint/26/1/11>.

**Chen:2004:SUM**

- [418] Mayru Chen and Ming-Chia Li. Stability of uniformly Morse–Smale gradient-like numerical methods for flows. *IMA Journal of Numerical Analysis*, 24(4):577–585, October 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/24/4/577>; <http://imanum.oupjournals.org/cgi/reprint/24/4/577>.

**Chen:2016:WGM**

- [419] Wenbin Chen, Fang Wang, and Yanqiu

Wang. Weak Galerkin method for the coupled Darcy–Stokes flow. *IMA Journal of Numerical Analysis*, 36(2):897–921, April 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/2/897>.

**Chen:2012:CEB**

- [420] Xiaojun Chen and Zhengyu Wang. Computational error bounds for a differential linear variational inequality. *IMA Journal of Numerical Analysis*, 32(3):957–982, July 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/3/957.full.pdf+html>.

**Chen:2012:AVD**

- [421] Yanlai Chen and Bernardo Cockburn. Analysis of variable-degree Hdg methods for convection-diffusion equations. Part I: general nonconforming meshes. *IMA Journal of Numerical Analysis*, 32(4):1267–1293, October 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/4/1267.full.pdf+html>.

**Chen:2016:NDG**

- [422] Yanlai Chen, Bernardo Cockburn, and Bo Dong. A new discontinuous Galerkin method, conserving the discrete  $H^2$ -norm, for third-order linear equations in one space dimension. *IMA Journal of Numerical Analysis*, 36(4):1570–1598, October 2016. CODEN IJNADH.

ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/4/1570>.

**Chen:2014:AMM**

- [423] Yung-Wei Chen, Chun-Ming Chang, Chein-Shan Liu, and Jiang-Ren Chang. Application of a modified manifold-based exponentially convergent algorithm to solve elliptic boundary-value problems. *IMA Journal of Numerical Analysis*, 34(1):362–389, January 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/1/362.full.pdf+html>.

**Chen:1994:EEF**

- [424] Zhi Ming Chen and K.-H. Hoffmann. An error estimate for a finite-element scheme for a phase field model. *IMA Journal of Numerical Analysis*, 14(2):243–255, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Chen:2000:NMS**

- [425] Zhiming Chen, Tsimin Shih, and Xingye Yue. Numerical methods for Stefan problems with prescribed convection and nonlinear flux. *IMA Journal of Numerical Analysis*, 20(1):81–98, January 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_01/200081.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_01/200081.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_01/pdf/200081.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_01/pdf/200081.pdf).

**Cheng:2009:DFN**

- [426] Wanyou Cheng and Dong-Hui Li. A derivative-free nonmonotone line search and its application to the spectral residual method. *IMA Journal of Numerical Analysis*, 29(3):814–825, July 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/3/814>; <http://imajna.oxfordjournals.org/cgi/reprint/29/3/814>.

**Chernih:2014:MMC**

- [427] A. Chernih and Q. T. Le Gia. Multiscale methods with compactly supported radial basis functions for Galerkin approximation of elliptic PDEs. *IMA Journal of Numerical Analysis*, 34(2):569–591, April 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/2/569.full.pdf+html>.

**Cheung:2001:FEA**

- [428] C. W. Cheung and C.-H. Lai. On a flexible elimination algorithm with applications to panel element equations. *IMA Journal of Numerical Analysis*, 21(2):603–619, April 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_02/210603.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_02/210603.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_02/pdf/210603.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_02/pdf/210603.pdf).

**Cheung:2015:SAC**

- [429] Dennis Cheung and Felipe Cucker. Smoothed analysis of component-

wise condition numbers for sparse matrices. *IMA Journal of Numerical Analysis*, 35(1):74–88, January 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/1/74>.

**Chiang:1994:POS**

- [430] Yi-Ling F. Chiang. Properties of optimal schemes for linear 1D PDE initial value hyperbolic problems with variable coefficients. *IMA Journal of Numerical Analysis*, 14(2):211–232, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Chien:1997:DGM**

- [431] David Da-Kwun Chien and Kendall Atkinson. A discrete Galerkin method for a hypersingular boundary integral equation. *IMA Journal of Numerical Analysis*, 17(3):463–478, July 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_17/Issue\\_03/170463.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_03/170463.sgm.abs.html).

**Chin:2011:MPO**

- [432] Siu A. Chin and Jürgen Geiser. Multiproduct operator splitting as a general method of solving autonomous and nonautonomous equations. *IMA Journal of Numerical Analysis*, 31(4):1552–1577, October 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/4/1552.full.pdf+html>.

**Choquet:2011:AFV**

- [433] Catherine Choquet and Sébastien Zimmermann. Analysis of a finite-volume–finite-element scheme for a nuclear transport model. *IMA Journal of Numerical Analysis*, 31(1):86–115, January 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/1/86.full.pdf+html>.

**Chouly:2018:RBP**

- [434] Franz Chouly, Mathieu Fabre, Patrick Hild, Jérôme Pousin, and Yves Renard. Residual-based a posteriori error estimation for contact problems approximated by Nitsche’s method. *IMA Journal of Numerical Analysis*, 38(2):921–954, April 18, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/2/921/3871418>.

**Christiansen:2011:DMK**

- [435] Snorre H. Christiansen and Tore Gunnar Halvorsen. Discretizing the Maxwell–Klein–Gordon equation by the lattice gauge theory formalism. *IMA Journal of Numerical Analysis*, 31(1):1–24, January 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/1/1.full.pdf+html>.

**Christiansen:2013:VEA**

- [436] Snorre H. Christiansen and Ragnar Winther. On variational eigenvalue approximation of semidefinite

operators. *IMA Journal of Numerical Analysis*, 33(1):164–189, January 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/1/164.full.pdf+html>.

**Christianson:1992:AHR**

- [437] Bruce Christianson. Automatic Hessians by reverse accumulation. *IMA Journal of Numerical Analysis*, 12(2):135–150, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Christie:1981:PAN**

- [438] I. Christie, D. F. Griffiths, A. R. Mitchell, and J. M. Sanz-Serna. Product approximation for nonlinear problems in the finite element method. *IMA Journal of Numerical Analysis*, 1(3):253–266, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Christie:1991:ERS**

- [439] I. Christie and C. Palencia. An exact Riemann solver for a fluidized bed model. *IMA Journal of Numerical Analysis*, 11(4):493–508, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Chu:1990:SAI**

- [440] Moody T. Chu. Solving additive inverse eigenvalue problems for symmetric matrices by the homotopy method. *IMA Journal of Numerical Analysis*, 10(3):331–342, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Chu:2015:FRF**

- [441] Moody T. Chu and Matthew M. Lin. On the finite rank and finite-dimensional representation of bounded semi-infinite Hankel operators. *IMA Journal of Numerical Analysis*, 35(3):1256–1276, July 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/3/1256>.

**Chu:1995:ETP**

- [442] Moody T. Chu and Joel W. Wright. The educational testing problem revisited. *IMA Journal of Numerical Analysis*, 15(1):141–160, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Chu:2018:HDF**

- [443] Van Tiep Chu and Viet Ha Hoang. High-dimensional finite elements for multiscale Maxwell-type equations. *IMA Journal of Numerical Analysis*, 38(1):227–270, January 25, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/1/227/3063754>.

**Chung:2012:SDG**

- [444] Eric T. Chung and Chak Shing Lee. A staggered discontinuous Galerkin method for the curl-curl operator. *IMA Journal of Numerical Analysis*, 32(3):1241–1265, July 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/3/1241.full.pdf+html>.

**Cifani:2011:DGM**

- [445] Simone Cifani, Espen R. Jakobsen, and Kenneth H. Karlsen. The discontinuous Galerkin method for fractal conservation laws. *IMA Journal of Numerical Analysis*, 31(3):1090–1122, July 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/3/1090.full.pdf+html>.

**Cimrak:2005:EES**

- [446] Ivan Cimrak. Error estimates for a semi-implicit numerical scheme solving the Landau–Lifshitz equation with an exchange field. *IMA Journal of Numerical Analysis*, 25(3):611–634, July 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/25/3/611>; <http://imanum.oxfordjournals.org/cgi/reprint/25/3/611>.

**Clark:1988:LRI**

- [447] D. I. Clark and M. R. Osborne. On linear restricted and interval least-squares problems. *IMA Journal of Numerical Analysis*, 8(1):23–36, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Clavero:2006:UCA**

- [448] C. Clavero, J. L. Gracia, and J. C. Jorge. A uniformly convergent alternating direction HODIE finite difference scheme for 2D time-dependent convection–diffusion problems. *IMA Journal of Numerical Analysis*, 26(1):155–172, January 2006. CODEN IJNADH.

ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/26/1/155>; <http://imanum.oxfordjournals.org/cgi/reprint/26/1/155>.

**Clavero:2000:ADS**

- [449] C. Clavero, J. C. Jorge, F. Lisbona, and G. I. Shishkin. An alternating direction scheme on a nonuniform mesh for reaction-diffusion parabolic problems. *IMA Journal of Numerical Analysis*, 20(2):263–280, April 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_02/200263.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_02/200263.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_02/pdf/200263.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_02/pdf/200263.pdf).

**Clenshaw:1988:SLI**

- [450] C. W. Clenshaw and P. R. Turner. The symmetric level-index system. *IMA Journal of Numerical Analysis*, 8(4):517–526, October 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Cockburn:2014:MHM**

- [451] B. Cockburn, O. Dubois, J. Gopalakrishnan, and S. Tan. Multigrid for an HDG method. *IMA Journal of Numerical Analysis*, 34(4):1386–1425, October 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/4/1386>.

**Cockburn:2018:DSH**

- [452] Bernardo Cockburn and Guosheng Fu. Devising superconvergent HDG

methods with symmetric approximate stresses for linear elasticity by  $M$ -decompositions. *IMA Journal of Numerical Analysis*, 38(2):566–604, April 18, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/2/566/3861276>.

**Cockburn:2017:NDS**

- [453] Bernardo Cockburn, Guosheng Fu, and Weifeng Qiu. A note on the devising of superconvergent HDG methods for Stokes flow by  $M$ -decompositions. *IMA Journal of Numerical Analysis*, 37(2):730–749, April 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/2/730/2669997/A-note-on-the-devising-of-superconvergent-HDG>.

**Cockburn:2012:DSC**

- [454] Bernardo Cockburn and Francisco-Javier Sayas. The devising of symmetric couplings of boundary element and discontinuous Galerkin methods. *IMA Journal of Numerical Analysis*, 32(3):765–794, July 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/3/765.full.pdf+html>.

**Coclite:2008:NSC**

- [455] G. M. Coclite, K. H. Karlsen, and N. H. Risebro. Numerical schemes for computing discontinuous solutions of the Degasperis–Procesi equation. *IMA Journal of Numerical Analysis*, 28(1):80–105, January 2008. CODEN IJNADH. ISSN

0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/1/80>; <http://imajna.oxfordjournals.org/cgi/reprint/28/1/80>.

**Cocozza-Thivent:2006:FVS**

- [456] C. Cocozza-Thivent, R. Eymard, and S. Mercier. A finite-volume scheme for dynamic reliability models. *IMA Journal of Numerical Analysis*, 26(3):446–471, July 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://comjnl.oxfordjournals.org/cgi/content/abstract/26/3/446>; <http://comjnl.oxfordjournals.org/cgi/reprint/26/3/446>.

**Cocozza-Thivent:2017:NMP**

- [457] Christiane Cocozza-Thivent, Robert Eymard, Ludovic Goudenège, and Michel Roussignol. Numerical methods for piecewise deterministic Markov processes with boundary. *IMA Journal of Numerical Analysis*, 37(1):170–208, January 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/1/170/2884282/Numerical-methods-for-piecewise-deterministic>.

**Codenotti:1989:NQI**

- [458] B. Codenotti and F. Romani. A note on quadrant interlocking factorization. *IMA Journal of Numerical Analysis*, 9(2):139–143, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Cohen:2016:KWU**

- [459] Albert Cohen and Ronald DeVore. Kolmogorov widths under holomorphic mappings. *IMA Journal of Numerical Analysis*, 36(1):1–12, January 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/1/1>.

**Cohen:2006:CPN**

- [460] David Cohen. Conservation properties of numerical integrators for highly oscillatory Hamiltonian systems. *IMA Journal of Numerical Analysis*, 26(1):34–59, January 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/26/1/34>; <http://imanum.oxfordjournals.org/cgi/reprint/26/1/34>.

**Cohen:2016:FDA**

- [461] David Cohen and Lluís Quer-Sardanyons. A fully discrete approximation of the one-dimensional stochastic wave equation. *IMA Journal of Numerical Analysis*, 36(1):400–420, January 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/1/400>.

**Coleman:1989:ENM**

- [462] John P. Coleman. Errata for: “Numerical methods for  $y'' = f(x, y)$  via rational approximations for the cosine” [IMA J. Numer. Anal. **9** (1989), no. 2, 145–165; MR 90i:65130]. *IMA Jour-*

*nal of Numerical Analysis*, 9(4):i, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). See [463].

**Coleman:1989:NMR**

- [463] John P. Coleman. Numerical methods for  $y'' = f(x, y)$  via rational approximations for the cosine. *IMA Journal of Numerical Analysis*, 9(2):145–165, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). See errata [462].

**Coleman:2003:OCC**

- [464] John P. Coleman. Order conditions for a class of two-step methods for  $y' = f(x, y)$ . *IMA Journal of Numerical Analysis*, 23(2):197–220, April 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_02/230197.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_02/230197.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_02/pdf/230197.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_02/pdf/230197.pdf).

**Coleman:1996:SEF**

- [465] John P. Coleman and Liviu Gr. Ixaru.  $P$ -stability and exponential-fitting methods for  $y' = f(x, y)$ . *IMA Journal of Numerical Analysis*, 16(2):179–199, April 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_16/Issue\\_02/160179.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_02/160179.sgm.abs.html).

**Colombini:2015:NAV**

- [466] F. Colombini and J. Rauch. Numerical analysis of very weakly well-posed hyperbolic Cauchy problems. *IMA Journal of Numerical Analysis*, 35(3):989–



1010, July 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/3/989>.

**Congreve:2013:DFG**

- [467] Scott Congreve, Paul Houston, Endre Süli, and Thomas P. Wihler. Discontinuous Galerkin finite element approximation of quasilinear elliptic boundary value problems II: strongly monotone quasi-Newtonian flows. *IMA Journal of Numerical Analysis*, 33(4):1386–1415, October 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/4/1386.full.pdf+html>.

**Conn:2008:GSS**

- [468] Andrew R. Conn, Katya Scheinberg, and Luís N. Vicente. Geometry of sample sets in derivative-free optimization: polynomial regression and underdetermined interpolation. *IMA Journal of Numerical Analysis*, 28(4):721–748, October 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/4/721>.

**Coope:1993:CIN**

- [469] Ian D. Coope. Curve interpolation with nonlinear spiral splines. *IMA Journal of Numerical Analysis*, 13(3):327–341, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Cooper:1984:GAS**

- [470] G. J. Cooper. A generalization of algebraic stability for Runge–Kutta

methods. *IMA Journal of Numerical Analysis*, 4(4):427–440, October 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Cooper:1986:ESA**

- [471] G. J. Cooper. On the existence of solutions for algebraically stable Runge–Kutta methods. *IMA Journal of Numerical Analysis*, 6(3):325–330, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Cooper:1987:SRK**

- [472] G. J. Cooper. Stability of Runge–Kutta methods for trajectory problems. *IMA Journal of Numerical Analysis*, 7(1):1–13, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Cooper:1992:WNS**

- [473] G. J. Cooper. Weak nonlinear stability of implicit Runge–Kutta methods. *IMA Journal of Numerical Analysis*, 12(1):57–65, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Cooper:1983:ISI**

- [474] G. J. Cooper and J. C. Butcher. An iteration scheme for implicit Runge–Kutta methods. *IMA Journal of Numerical Analysis*, 3(2):127–140, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Coquel:2012:CTS**

- [475] Frédéric Coquel, Marie Postel, and Quang-Huy Tran. Convergence of time-space adaptive algorithms for nonlinear conservation laws. *IMA Journal of Numerical Analysis*, 32(4):1440–

1483, October 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/4/1440.full.pdf+html>.

**Coquereaux:1990:IMC**

- [476] R. Coquereaux, A. Grossmann, and B. E. Lautrup. Iterative method for calculation of the Weierstrass elliptic function. *IMA Journal of Numerical Analysis*, 10(1):119–128, January 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Coughlan:2007:TLM**

- [477] James J. Coughlan, Adrian T. Hill, and Hartmut Logemann. The  $\ddagger$ -transform and linear multistep stability. *IMA Journal of Numerical Analysis*, 27(1):45–73, January 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/1/45>; <http://imajna.oxfordjournals.org/cgi/reprint/27/1/45>.

**Cox:1981:LSS**

- [478] M. G. Cox. The least squares solution of overdetermined linear equations having band or augmented band structure. *IMA Journal of Numerical Analysis*, 1(1):3–22, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Cox:1982:DVI**

- [479] M. G. Cox. Direct versus iterative methods of solution for multivariate spline-fitting problems. *IMA Journal of Numerical Analysis*, 2(1):

73–81, January 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Cox:1991:ACB**

- [480] M. G. Cox and P. M. Harris. The approximation of a composite Bézier cubic curve by a composite Bézier quadratic curve. *IMA Journal of Numerical Analysis*, 11(2):159–180, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Cox:1985:LSS**

- [481] M. G. Cox and P. E. Manneback. Least-squares spline regression with block-diagonal variance matrices. *IMA Journal of Numerical Analysis*, 5(3):275–286, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Cox:1989:ALS**

- [482] Maurice G. Cox and Helen M. Jones. An algorithm for least-squares circle fitting to data with specified uncertainty ellipses. *IMA Journal of Numerical Analysis*, 9(3):285–298, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Creuse:2013:PEE**

- [483] Emmanuel Creusé and Serge Nicaise. A posteriori error estimator based on gradient recovery by averaging for convection-diffusion-reaction problems approximated by discontinuous Galerkin methods. *IMA Journal of Numerical Analysis*, 33(1):212–241, January 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/1/212>.

oxfordjournals.org/content/33/1/212.full.pdf+html.

**Creuse:2017:GEE**

- [484] Emmanuel Creusé, Serge Nicaise, and Roberta Tittarelli. A guaranteed equilibrated error estimator for the  $A - \varphi$  and  $T - \Omega$  magnetodynamic harmonic formulations of the Maxwell system. *IMA Journal of Numerical Analysis*, 37(2):750–773, April 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/2/750/2669988/A-guaranteed-equilibrated-error-estimator-for-the>.

**Criscuolo:2014:NEC**

- [485] G. Criscuolo. Numerical evaluation of certain strongly singular integrals. *IMA Journal of Numerical Analysis*, 34(2):651–674, April 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/2/651.full.pdf+html>.

**Crowdy:2016:HBS**

- [486] D. G. Crowdy, S. Tanveer, and T. Delillo. Hybrid basis scheme for computing electrostatic fields exterior to close-to-touching discs. *IMA Journal of Numerical Analysis*, 36(2):743–769, April 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/2/743>.

**Cubillos:1987:EPF**

- [487] Pedro O. Cubillos. Eigenvalue problems for Fredholm integral operators.

*IMA Journal of Numerical Analysis*, 7(2):191–204, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Cui:2014:AHM**

- [488] Jintao Cui and Wujun Zhang. An analysis of HDG methods for the Helmholtz equation. *IMA Journal of Numerical Analysis*, 34(1):279–295, January 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/1/279.full.pdf+html>.

**Cullinan:1990:DSU**

- [489] M. P. Cullinan. Data smoothing using nonnegative divided differences and  $l_2$  approximation. *IMA Journal of Numerical Analysis*, 10(4):583–608, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Cuminato:1992:UCC**

- [490] J. A. Cuminato. Uniform convergence of a collocation method for the numerical solution of Cauchy-type singular integral equations: a generalization. *IMA Journal of Numerical Analysis*, 12(1):31–45, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Curtis:1981:PST**

- [491] A. R. Curtis. On a property of some test equations for finite difference or finite element methods. *IMA Journal of Numerical Analysis*, 1(3):369–375, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Curtis:1983:JMP**

- [492] A. R. Curtis. Jacobian matrix properties and their impact on choice of software for stiff ODE systems. *IMA Journal of Numerical Analysis*, 3(4):397–415, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Curtis:1986:ACA**

- [493] A. R. Curtis. Analysis of covariance after nonlinear least-squares fitting. *IMA Journal of Numerical Analysis*, 6(4):453–461, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Curtis:2016:HNC**

- [494] Frank E. Curtis and Wei Guo. Handling nonpositive curvature in a limited memory steepest descent method. *IMA Journal of Numerical Analysis*, 36(2):717–742, April 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/2/717>.

**Curtis:2018:RLC**

- [495] Frank E. Curtis and Wei Guo.  $R$ -linear convergence of limited memory steepest descent. *IMA Journal of Numerical Analysis*, 38(2):720–742, April 18, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/2/720/3749201>.

**Curtis:2008:FPF**

- [496] Frank E. Curtis and Jorge Nocedal. Flexible penalty functions for nonlin-

ear constrained optimization. *IMA Journal of Numerical Analysis*, 28(4):749–769, October 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/4/749>.

**Custodio:2008:USG**

- [497] A. L. Custódio, J. E. Dennis, Jr., and L. N. Vicente. Using simplex gradients of nonsmooth functions in direct search methods. *IMA Journal of Numerical Analysis*, 28(4):770–784, October 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/4/770>.

**Cuyt:1988:EBC**

- [498] Annie Cuyt and Brigitte Verdonk. Evaluation of branched continued fractions using block-tridiagonal linear systems. *IMA Journal of Numerical Analysis*, 8(2):209–217, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Czepiel:2015:NSV**

- [499] Jerzy Czepiel and Piotr Kalita. Numerical solution of a variational-hemivariational inequality modelling simplified adhesion of an elastic body. *IMA Journal of Numerical Analysis*, 35(1):372–393, January 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/1/372>.

**Da:2002:UBT**

- [500] Xu Da. Uniform  $l$  behaviour for time discretization of a Volterra equation with completely monotonic kernel: I. stability. *IMA Journal of Numerical Analysis*, 22(1):133–151, January 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_01/220133.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_01/220133.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_01/pdf/220133.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_01/pdf/220133.pdf).

**daVeiga:2011:UAH**

- [501] Beirão da Veiga, Jérôme Droniou, and Gianmarco Manzini. A unified approach for handling convection terms in finite volumes and mimetic discretization methods for elliptic problems. *IMA Journal of Numerical Analysis*, 31(4):1357–1401, October 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/4/1357.full.pdf+html>.

**daVeiga:2014:VEM**

- [502] Lourenço Beirão da Veiga and Gianmarco Manzini. A virtual element method with arbitrary regularity. *IMA Journal of Numerical Analysis*, 34(2):759–781, April 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/2/759.full.pdf+html>.

**Dahlke:2007:AFM**

- [503] Stephan Dahlke, Thorsten Raasch, Manuel Werner, Massimo Fornasier,

and Rob Stevenson. Adaptive frame methods for elliptic operator equations: the steepest descent approach. *IMA Journal of Numerical Analysis*, 27(4):717–740, October 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/4/717>; <http://imajna.oxfordjournals.org/cgi/reprint/27/4/717>.

**Dahmardah:1983:FSS**

- [504] H. O. Dahmardah and D. F. Mayers. A Fourier-series solution of the Crank-Gupta equation. *IMA Journal of Numerical Analysis*, 3(1):81–85, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Dai:2015:CQO**

- [505] Xiaoying Dai, Lianhua He, and Aihui Zhou. Convergence and quasi-optimal complexity of adaptive finite element computations for multiple eigenvalues. *IMA Journal of Numerical Analysis*, 35(4):1934–1977, October 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/4/1934>.

**Dai:1996:CPF**

- [506] Y. H. Dai and Y. Yuan. Convergence properties of the Fletcher-Reeves method. *IMA Journal of Numerical Analysis*, 16(2):155–164, April 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_16/Issue\\_02/160155.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_02/160155.sgm.abs.html).

**Dai:2006:CBB**

- [507] Yu-Hong Dai, William W. Hager, Klaus Schittkowski, and Hongchao Zhang. The cyclic Barzilai–Borwein method for unconstrained optimization. *IMA Journal of Numerical Analysis*, 26(3):604–627, July 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://comjnl.oxfordjournals.org/cgi/content/abstract/26/3/604>; <http://comjnl.oxfordjournals.org/cgi/reprint/26/3/604>.

**Dai:2002:RLC**

- [508] Yu-Hong Dai and Li-Zhi Liao. R-linear convergence of the Barzilai and Borwein gradient method. *IMA Journal of Numerical Analysis*, 22(1):1–10, January 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_01/220001.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_01/220001.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_01/pdf/220001.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_01/pdf/220001.pdf).

**Dai:2003:AMG**

- [509] Yu-Hong Dai and Ya-Xiang Yuan. Alternate minimization gradient method. *IMA Journal of Numerical Analysis*, 23(3):377–393, July 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_03/drg007.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_03/drg007.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_03/pdf/drg007.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_03/pdf/drg007.pdf).

**Dallmann:2016:LPS**

- [510] Helene Dallmann, Daniel Arndt, and Gert Lube. Local projection stabiliza-

tion for the Oseen problem. *IMA Journal of Numerical Analysis*, 36(2):796–823, April 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/2/796>.

**Dardalhon:2013:APM**

- [511] F. Dardalhon, J.-C. Latché, and S. Minjeaud. Analysis of a projection method for low-order nonconforming finite elements. *IMA Journal of Numerical Analysis*, 33(1):295–317, January 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/1/295.full.pdf+html>.

**Das:1989:PEE**

- [512] P. C. Das and A. K. Pani. A priori error estimates in  $H^1$  and  $H^2$  norms for Galerkin approximations to a single-phase nonlinear Stefan problem in one space dimension. *IMA Journal of Numerical Analysis*, 9(2):213–229, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Dauner:1989:ATA**

- [513] Herbert Dauner and Christian H. Reinsch. An analysis of two algorithms for shape-preserving cubic spline interpolation. *IMA Journal of Numerical Analysis*, 9(3):299–314, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Davies:2004:SP**

- [514] E. B. Davies and M. Plum. Spectral pollution. *IMA Journal of Numerical Analysis*, 24(3):417–438,

- July 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_03/240417.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_03/240417.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_03/pdf/240417.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_03/pdf/240417.pdf).
- Davydov:2019:OSS**
- [515] Oleg Davydov and Robert Schaback. Optimal stencils in Sobolev spaces. *IMA Journal of Numerical Analysis*, 39(1):398–422, January 25, 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/1/398/4781306>.
- Davydov:2008:ISD**
- [516] Oleg Davydov and Larry L. Schumaker. Interpolation and scattered data fitting on manifolds using projected Powell–Sabin splines. *IMA Journal of Numerical Analysis*, 28(4):785–805, October 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/4/785>.
- Dawson:1982:FAR**
- [517] Jeremy E. Dawson. A formula approximating the root of a function. *IMA Journal of Numerical Analysis*, 2(3):371–375, July 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Dax:1986:EAS**
- [518] Achiya Dax. An efficient algorithm for solving the rectilinear multifacility location problem. *IMA Journal of Numerical Analysis*, 6(3):343–355, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Dax:1989:MSL**
- [519] Achiya Dax. The minimax solution of linear equations subject to linear constraints. *IMA Journal of Numerical Analysis*, 9(1):95–109, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- DeAsmundis:2013:SPS**
- [520] Roberta De Asmundis, Daniela di Serafino, Filippo Riccio, and Gerardo Toraldo. On spectral properties of steepest descent methods. *IMA Journal of Numerical Analysis*, 33(4):1416–1435, October 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/4/1416.full.pdf+html>.
- DeBonis:2009:NMS**
- [521] M. C. De Bonis and G. Mastroianni. Nyström method for systems of integral equations on the real semiaxis. *IMA Journal of Numerical Analysis*, 29(3):632–650, July 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/3/632>; <http://imajna.oxfordjournals.org/cgi/reprint/29/3/632>.
- deDios:2017:ASP**
- [522] Blanca Ayuso de Dios, Ralf Hiptmair, and Cecilia Pagliantini. Auxiliary space preconditioners for SIP-DG discretizations of  $H(\text{curl})$ -elliptic problems with discontinuous coefficients. *IMA Journal of Numerical Analysis*, 37(1):1–20, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

*ical Analysis*, 37(2):646–686, April 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/2/646/2669962/Auxiliary-space-preconditioners-for-SIP-DG>.

**DeFrutos:2010:AAT**

- [523] Javier De Frutos, Bosco García-Archilla, and Julia Novo. Accurate approximations to time-dependent nonlinear convection–diffusion problems. *IMA Journal of Numerical Analysis*, 30(4):1137–1158, October 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/30/4/1137.full.pdf+html>.

**deFrutos:2011:NCD**

- [524] Javier de Frutos, Bosco García-Archilla, and Julia Novo. Nonlinear convection-diffusion problems: fully discrete approximations and a posteriori error estimates. *IMA Journal of Numerical Analysis*, 31(4):1402–1430, October 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/4/1402.full.pdf+html>.

**Ysern:2015:OES**

- [525] Bernardo de la Calle Ysern. Optimal extension of the Szegő quadrature. *IMA Journal of Numerical Analysis*, 35(2):722–748, April 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/2/722>.

**DeLeo:2016:HOT**

- [526] Mariano De Leo, Diego Rial, and Constanza Sánchez de la Vega. High-order time-splitting methods for irreversible equations. *IMA Journal of Numerical Analysis*, 36(4):1842–1866, October 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/4/1842>.

**deNiet:2009:NSL**

- [527] Arie C. de Niet and Fred W. Wubs. Numerically stable  $LDL^T$ -factorization of  $\mathcal{F}$ -type saddle point matrices. *IMA Journal of Numerical Analysis*, 29(1):208–234, January 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**dePillis:1981:IMP**

- [528] J. de Pillis and M. Neumann. Iterative methods with  $k$ -part splittings. *IMA Journal of Numerical Analysis*, 1(1):65–79, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**deTeran:2016:BSP**

- [529] Fernando de Terán, Froilán M. Dopico, and Javier Pérez. Backward stability of polynomial root-finding using Fiedler companion matrices. *IMA Journal of Numerical Analysis*, 36(1):133–173, January 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/1/133>.



**Deckelnick:2010:HNB**

- [530] Klaus Deckelnick, Gerhard Dziuk, Charles M. Elliott, and Claus-Justus Heine. An  $h$ -narrow band finite-element method for elliptic equations on implicit surfaces. *IMA Journal of Numerical Analysis*, 30(2):351–376, April 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/2/351>; <http://imajna.oxfordjournals.org/cgi/reprint/30/2/351>.

**Deckelnick:1998:FEE**

- [531] Klaus Deckelnick and Charles M. Elliott. Finite element error bounds for a curve shrinking with prescribed normal contact to a fixed boundary. *IMA Journal of Numerical Analysis*, 18(4):635–654, October 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_04/180635.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_04/180635.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_04/pdf/180635.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_04/pdf/180635.pdf).

**Deckelnick:2000:CDF**

- [532] Klaus Deckelnick and Kunibert G. Siebert.  $W^{1,\infty}$ -convergence of the discrete free boundary for obstacle problems. *IMA Journal of Numerical Analysis*, 20(3):481–498, July 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_03/200481.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_03/200481.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_03/pdf/200481.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_03/pdf/200481.pdf).

**Deckers:2015:CDT**

- [533] Karl Deckers. Christoffel–Darboux-type formulae for orthonormal rational functions with arbitrary complex poles. *IMA Journal of Numerical Analysis*, 35(4):1842–1863, October 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/4/1842>.

**Deckers:2009:RAO**

- [534] Karl Deckers and Adhemar Bultheel. Recurrence and asymptotics for orthonormal rational functions on an interval. *IMA Journal of Numerical Analysis*, 29(1):1–23, January 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Dedieu:2013:ASS**

- [535] Jean-Pierre Dedieu, Gregorio Malajovich, and Michael Shub. Adaptive step-size selection for homotopy methods to solve polynomial equations. *IMA Journal of Numerical Analysis*, 33(1):1–29, January 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/1/1.full.pdf+html>.

**Dedieu:2003:NMR**

- [536] Jean-Pierre Dedieu, Pierre Priouret, and Gregorio Malajovich. Newton’s method on Riemannian manifolds: covariant alpha theory. *IMA Journal of Numerical Analysis*, 23(3):395–419, July 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/](http://www3.oup.co.uk/imanum/hdb/Volume_23/)

Issue\_03/drg003.sgm.abs.html; [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_03/pdf/drg003.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_03/pdf/drg003.pdf).

**Deif:1990:RPP**

- [537] A. S. Deif. Realistic a priori and a posteriori error bounds for computed eigenvalues. *IMA Journal of Numerical Analysis*, 10(3):323–329, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Buono:2002:MMA**

- [538] Nicoletta Del Buono and Adrian T. Hill. On a multistep method approximating a linear sectorial evolution equation. *IMA Journal of Numerical Analysis*, 22(3):481–499, July 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_03/220481.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_03/220481.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_03/pdf/220481.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_03/pdf/220481.pdf).

**Pezzo:2015:OCF**

- [539] Leandro M. Del Pezzo and Sandra Martínez. Order of convergence of the finite element method for the  $p(x)$ -Laplacian. *IMA Journal of Numerical Analysis*, 35(4):1864–1887, October 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/4/1864>.

**Delbourgo:1994:AEH**

- [540] D. Delbourgo and D. Elliott. On the approximate evaluation of Hadamard finite-part integrals. *IMA Journal of Numerical Analysis*, 14(4):485–500,

1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Delbourgo:1989:SPI**

- [541] R. Delbourgo. Shape preserving interpolation to convex data by rational functions with quadratic numerator and linear denominator. *IMA Journal of Numerical Analysis*, 9(1):123–136, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Delbourgo:1983:RQS**

- [542] R. Delbourgo and J. A. Gregory.  $C^2$  rational quadratic spline interpolation to monotonic data. *IMA Journal of Numerical Analysis*, 3(2):141–152, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Delbourgo:1985:DDP**

- [543] R. Delbourgo and J. A. Gregory. The determination of derivative parameters for a monotonic rational quadratic interpolant. *IMA Journal of Numerical Analysis*, 5(4):397–406, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**DellAccio:2016:AOT**

- [544] Francesco Dell’Accio, Filomena Di Tommaso, and Kai Hormann. On the approximation order of triangular Shepard interpolation. *IMA Journal of Numerical Analysis*, 36(1):359–379, January 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/1/359>.

**Dellnitz:1992:CBP**

- [545] Michael Dellnitz. Computational bifurcation of periodic solutions in systems with symmetry. *IMA Journal of Numerical Analysis*, 12(3):429–455, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). IMA Conference on Dynamics of Numerics and Numerics of Dynamics (Bristol, 1990).

**Dellnitz:2002:FZM**

- [546] Michael Dellnitz, Oliver Schütze, and Stefan Sertl. Finding zeros by multilevel subdivision techniques. *IMA Journal of Numerical Analysis*, 22(2):167–185, April 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_02/220167.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_02/220167.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_02/pdf/220167.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_02/pdf/220167.pdf).

**Demetriou:1991:LSS**

- [547] I. C. Demetriou and M. J. D. Powell. Least squares smoothing of univariate data to achieve piecewise monotonicity. *IMA Journal of Numerical Analysis*, 11(3):411–432, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Demetriou:1991:MSS**

- [548] I. C. Demetriou and M. J. D. Powell. The minimum sum of squares change to univariate data that gives convexity. *IMA Journal of Numerical Analysis*, 11(3):433–448, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Descombes:2013:LTS**

- [549] Stéphane Descombes and Mechthild Thalhammer. The Lie–Trotter splitting for nonlinear evolutionary problems with critical parameters: a compact local error representation and application to nonlinear Schrödinger equations in the semiclassical regime. *IMA Journal of Numerical Analysis*, 33(2):722–745, April 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/2/722.full.pdf+html>.

**dHalluin:2005:RNM**

- [550] Y. d’Halluin, P. A. Forsyth, and K. R. Vetzal. Robust numerical methods for contingent claims under jump diffusion processes. *IMA Journal of Numerical Analysis*, 25(1):87–112, January 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/25/1/87>; <http://imanum.oupjournals.org/cgi/reprint/25/1/87>.

**Dharmaraja:2010:OST**

- [551] Sohan Dharmaraja, Yinghui Wang, and Gilbert Strang. Optimal stability for trapezoidal–backward difference split-steps. *IMA Journal of Numerical Analysis*, 30(1):141–148, January 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/1/141>; <http://imajna.oxfordjournals.org/cgi/reprint/30/1/141>.

**DiPietro:2017:AOM**

- [552] Daniele A. Di Pietro and Alexandre Ern. Arbitrary-order mixed methods for heterogeneous anisotropic diffusion on general meshes. *IMA Journal of Numerical Analysis*, 37(1):40–63, January 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/1/40/2669935/Arbitrary-order-mixed-methods-for-heterogeneous>.

**Dick:2007:RSA**

- [553] Josef Dick, Gunther Leobacher, and Friedrich Pillichshammer. Randomized Smolyak algorithms based on digital sequences for multivariate integration. *IMA Journal of Numerical Analysis*, 27(4):655–674, October 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/4/655>; <http://imajna.oxfordjournals.org/cgi/reprint/27/4/655>.

**Diegel:2016:SCS**

- [554] Amanda E. Diegel, Cheng Wang, and Steven M. Wise. Stability and convergence of a second-order mixed finite element method for the Cahn–Hilliard equation. *IMA Journal of Numerical Analysis*, 36(4):1867–1897, October 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/4/1867>.

**Diening:2014:LDG**

- [555] Lars Diening, Dietmar Kröner, Michael

Ruzicka, and Ioannis Touloupoulos. A local discontinuous Galerkin approximation for systems with  $p$ -structure. *IMA Journal of Numerical Analysis*, 34(4):1447–1488, October 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/4/1447>.

**Dierckx:1981:ASF**

- [556] P. Dierckx. An algorithm for surface-fitting with spline functions. *IMA Journal of Numerical Analysis*, 1(3):267–283, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Dierckx:1992:ASF**

- [557] P. Dierckx, S. Van Leemput, and T. Vermeire. Algorithms for surface fitting using Powell–Sabin splines. *IMA Journal of Numerical Analysis*, 12(2):271–299, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Diethelm:1997:GCQ**

- [558] Kai Diethelm. Generalized compound quadrature formulae for finite-part integrals. *IMA Journal of Numerical Analysis*, 17(3):479–493, July 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_17/Issue\\_03/170479.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_03/170479.sgm.abs.html).

**Diogo:1991:HTC**

- [559] Teresa Diogo, Sean McKee, and Tao Tang. A Hermite-type collocation method for the solution of an integral equation with a certain weakly

singular kernel. *IMA Journal of Numerical Analysis*, 11(4):595–605, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Discacciati:2018:OSM**

- [560] Marco Discacciati and Luca Gerardo-Giorda. Optimized Schwarz methods for the Stokes–Darcy coupling. *IMA Journal of Numerical Analysis*, 38(4):1959–1983, October 16, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/4/1959/4124872>.

**Ditzian:1988:MSD**

- [561] Z. Ditzian. The modulus of smoothness and discrete data in a square domain. *IMA Journal of Numerical Analysis*, 8(3):311–319, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Dixon:1984:RII**

- [562] Jennifer Dixon and Sean McKee. Repeated integral inequalities. *IMA Journal of Numerical Analysis*, 4(1):99–107, January 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Dixon:1985:UAC**

- [563] Jennifer Dixon and Sean McKee. A unified approach to convergence analysis of discretization methods for Volterra-type equations. *IMA Journal of Numerical Analysis*, 5(1):41–57, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Dobson:2014:TNP**

- [564] Matthew Dobson. There is no pointwise consistent quasicontinuum energy. *IMA Journal of Numerical Analysis*, 34(4):1541–1553, October 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/4/1541>.

**Dobson:2013:SSH**

- [565] Matthew Dobson, Claude Le Bris, and Frédéric Legoll. Symplectic schemes for highly oscillatory Hamiltonian systems: the homogenization approach beyond the constant frequency case. *IMA Journal of Numerical Analysis*, 33(1):30–56, January 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/1/30.full.pdf+html>.

**Dohler:1991:SGR**

- [566] R. Döhler. Squared Givens rotation. *IMA Journal of Numerical Analysis*, 11(1):1–5, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Dolejsi:2008:OEE**

- [567] Vít Dolejší, Miloslav Feistauer, Václav Kucera, and Veronika Sobotíková. An optimal  $L(L^2)$ -error estimate for the discontinuous Galerkin approximation of a nonlinear non-stationary convection–diffusion problem. *IMA Journal of Numerical Analysis*, 28(3):496–521, July 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/>

abstract/28/3/496; <http://imajna.oxfordjournals.org/cgi/reprint/28/3/496>.

**Dominguez:2011:SEE**

- [568] V. Domínguez, I. G. Graham, and V. P. Smyshlyaev. Stability and error estimates for Filon–Clenshaw–Curtis rules for highly oscillatory integrals. *IMA Journal of Numerical Analysis*, 31(4):1253–1280, October 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/4/1253.full.pdf+html>.

**Dond:2017:CAL**

- [569] Asha K. Dond, Neela Nataraj, and Amiya Kumar Pani. Convergence of an adaptive lowest-order Raviart–Thomas element method for general second-order linear elliptic problems. *IMA Journal of Numerical Analysis*, 37(2):832–860, April 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/2/832/2669977/Convergence-of-an-adaptive-lowest-order-Raviart>.

**Dong:2017:UHD**

- [570] Haixia Dong, Bo Wang, Ziqing Xie, and Li-Lian Wang. An unfitted hybridizable discontinuous Galerkin method for the Poisson interface problem and its error analysis. *IMA Journal of Numerical Analysis*, 37(1):444–476, January 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/1/444/2884283/>

An-unfitted-hybridizable-discontinuous-Galerkin.

**Donnelly:1989:SBC**

- [571] J. D. P. Donnelly. Stable boundary conditions for some hyperbolic difference schemes. *IMA Journal of Numerical Analysis*, 9(4):487–505, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Dopico:2012:ASS**

- [572] Froilán M. Dopico and Juan M. Molera. Accurate solution of structured linear systems via rank-revealing decompositions. *IMA Journal of Numerical Analysis*, 32(3):1096–1116, July 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/3/1096.full.pdf+html>.

**Dormand:1984:GEE**

- [573] J. R. Dormand, R. R. Duckers, and P. J. Prince. Global error estimation with Runge–Kutta methods. *IMA Journal of Numerical Analysis*, 4(2):169–184, April 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Dormand:1987:FRK**

- [574] J. R. Dormand, M. E. A. El-Mikkawy, and P. J. Prince. Families of Runge–Kutta–Nyström formulae. *IMA Journal of Numerical Analysis*, 7(2):235–250, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Dormand:1987:HOE**

- [575] J. R. Dormand, M. E. A. El-Mikkawy, and P. J. Prince. High-order embedded Runge–Kutta–Nyström formulae. *IMA Journal of Numerical Analysis*, 7(4):423–430, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). See corrigendum [576].

**Dormand:1991:CHO**

- [576] J. R. Dormand, M. E. A. El-Mikkawy, and P. J. Prince. Corrigendum: “High-order embedded Runge–Kutta–Nyström formulae” [IMA J. Numer. Anal. **7** (1987), no. 4, 423–430; MR 90d:65136]. *IMA Journal of Numerical Analysis*, 11(2):297, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). See [575].

**Dormand:1985:GEE**

- [577] J. R. Dormand and P. J. Prince. Global error estimation with Runge–Kutta methods. II. *IMA Journal of Numerical Analysis*, 5(4):481–497, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Doss:2005:QMU**

- [578] L. Jones Doss and Amiya K. Pani. A qualocation method for a unidimensional single phase semilinear Stefan problem. *IMA Journal of Numerical Analysis*, 25(1):139–159, January 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/25/1/139>; <http://imanum.oupjournals.org/cgi/reprint/25/1/139>.

**Doucette:1994:NMN**

- [579] Robert L. Doucette. A Nyström method for the numerical solution of Laplace’s equation with non-linear boundary conditions on a polygon. *IMA Journal of Numerical Analysis*, 14(4):501–522, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Driscoll:2016:RSC**

- [580] Tobin A. Driscoll and Nicholas Hale. Rectangular spectral collocation. *IMA Journal of Numerical Analysis*, 36(1):108–132, January 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/1/108>.

**Drmac:1999:PCS**

- [581] Zlatko Drmač. A posteriori computation of the singular vectors in a preconditioned Jacobi SVD algorithm. *IMA Journal of Numerical Analysis*, 19(2):191–213, April 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_02/190191.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_02/190191.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_02/pdf/190191.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_02/pdf/190191.pdf).

**Droniou:2003:CFV**

- [582] J. Droniou, R. Eymard, D. Hilhorst, and X. D. Zhou. Convergence of a finite-volume mixed finite-element method for an elliptic-hyperbolic system. *IMA Journal of Numerical Analysis*, 23(3):507–538, July 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642

(electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_03/230507.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_03/230507.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_03/pdf/230507.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_03/pdf/230507.pdf).

**Droniou:2016:GSS**

- [583] Jérôme Droniou, Robert Eymard, and Pierre Feron. Gradient schemes for Stokes problem. *IMA Journal of Numerical Analysis*, 36(4):1636–1669, October 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/4/1636>.

**Droniou:2019:MFE**

- [584] Jérôme Droniou, Muhammad Ilyas, Bishnu P. Lamichhane, and Glen E. Wheeler. A mixed finite element method for a sixth-order elliptic problem. *IMA Journal of Numerical Analysis*, 39(1):374–397, January 25, 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/1/374/4695479>.

**Droniou:2018:ILE**

- [585] Jérôme Droniou and Neela Nataraj. Improved  $L^2$  estimate for gradient schemes and super-convergence of the TPFA finite volume scheme. *IMA Journal of Numerical Analysis*, 38(3):1254–1293, July 17, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/3/1254/3860930>.

**Du:2009:AMF**

- [586] Qiang Du, Lili Ju, and Li Tian. Analysis of a mixed finite-volume dis-

cretization of fourth-order equations on general surfaces. *IMA Journal of Numerical Analysis*, 29(2):376–403, April 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/2/376>; <http://imajna.oxfordjournals.org/cgi/reprint/29/2/376>.

**Du:2019:ACD**

- [587] Qiang Du, Yunzhe Tao, Xiaochuan Tian, and Jiang Yang. Asymptotically compatible discretization of multidimensional nonlocal diffusion models and approximation of nonlocal Green’s functions. *IMA Journal of Numerical Analysis*, 39(2):607–625, April 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/2/607/4959864>.

**DuCroz:1992:SMM**

- [588] Jeremy J. Du Croz and Nicholas J. Higham. Stability of methods for matrix inversion. *IMA Journal of Numerical Analysis*, 12(1):1–19, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Duan:2015:SSF**

- [589] Huoyuan Duan, Roger C. E. Tan, Suh-Yuh Yang, and Cheng-Shu You. An SPD stabilized finite element method for the Stokes equations. *IMA Journal of Numerical Analysis*, 35(4):1812–1841, October 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/4/1812>.



**Dubeau:1985:PQS**

- [590] François Dubeau and Jean Savoie. Periodic quartic splines with equispaced knots. *IMA Journal of Numerical Analysis*, 5(2):183–189, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Duff:1983:ENW**

- [591] I. S. Duff and J. K. Reid. Errata: “A note on the work involved in no-fill sparse matrix factorization”. *IMA Journal of Numerical Analysis*, 3(2):253, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Duff:1993:ELF**

- [592] I. S. Duff, G. A. Watson, et al. Editorial: Leslie Fox, 1918–1992. *IMA Journal of Numerical Analysis*, 13(1):i–ii, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Duff:2005:CE**

- [593] Iain Duff and Endre Süli. Change of Editorship. *IMA Journal of Numerical Analysis*, 25(1):i, January 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/reprint/25/1/i>.

**Duff:1991:FSS**

- [594] Iain S. Duff, N. I. M. Gould, J. K. Reid, J. A. Scott, and K. Turner. The factorization of sparse symmetric indefinite matrices. *IMA Journal of Numerical Analysis*, 11(2):181–204, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Duff:1987:SSS**

- [595] Iain S. Duff and Ulrich Nowak. On sparse solvers in a stiff integrator of extrapolation type. *IMA Journal of Numerical Analysis*, 7(4):391–405, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Duff:1983:NWI**

- [596] Iain S. Duff and J. K. Reid. A note on the work involved in no-fill sparse matrix factorization. *IMA Journal of Numerical Analysis*, 3(1):37–40, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Dujardin:2016:ABS**

- [597] Guillaume Dujardin and Pauline Lafitte. Asymptotic behaviour of splitting schemes involving time-subcycling techniques. *IMA Journal of Numerical Analysis*, 36(4):1804–1841, October 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/4/1804>.

**Dumas:2011:CCW**

- [598] W. M. Dumas and M. V. Tretyakov. Computing conditional Wiener integrals of functionals of a general form. *IMA Journal of Numerical Analysis*, 31(3):1217–1251, July 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/3/1217.full.pdf+html>.

**Duncan:1991:SES**

- [599] D. B. Duncan. A simple and effective self-adaptive moving mesh for en-

thalpy formulations of phase change problems. *IMA Journal of Numerical Analysis*, 11(1):55–78, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Duncan:2007:OGD**

- [600] Dugald B. Duncan and Yiqi Qiu. Overlapping grids for the diffusion equation. *IMA Journal of Numerical Analysis*, 27(3):550–575, July 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/3/550>; <http://imajna.oxfordjournals.org/cgi/reprint/27/3/550>.

**Dunne:2009:FMN**

- [601] R. K. Dunne, E. O’Riordan, and G. I. Shishkin. Fitted mesh numerical methods for singularly perturbed elliptic problems with mixed derivatives. *IMA Journal of Numerical Analysis*, 29(3):712–730, July 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/3/712>; <http://imajna.oxfordjournals.org/cgi/reprint/29/3/712>.

**Dunst:2015:CRT**

- [602] Thomas Dunst. Convergence with rates for a time-discretization of the Stochastic Landau–Lifschitz–Gilbert equation. *IMA Journal of Numerical Analysis*, 35(2):615–651, April 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/2/615>.

**Dunst:2015:OCE**

- [603] Thomas Dunst, Markus Klein, Andreas Prohl, and Ailyn Schäfer. Optimal control in evolutionary micromagnetism. *IMA Journal of Numerical Analysis*, 35(3):1342–1380, July 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/3/1342>.

**Duran:2000:NIR**

- [604] A. Durán and J. M. Sanz-Serna. The numerical integration of relative equilibrium solutions. The nonlinear Schrödinger equation. *IMA Journal of Numerical Analysis*, 20(2):235–261, April 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_02/200235.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_02/200235.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_02/pdf/200235.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_02/pdf/200235.pdf).

**Duran:2012:SFE**

- [605] R. G. Durán, A. L. Lombardi, and M. I. Prieto. Superconvergence for finite element approximation of a convection-diffusion equation using graded meshes. *IMA Journal of Numerical Analysis*, 32(2):511–533, April 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/2/511.full.pdf+html>.

**Durand:2011:FDF**

- [606] Stephane Durand and Marián Slodicka. Fully discrete finite element method for Maxwell’s equations with

nonlinear conductivity. *IMA Journal of Numerical Analysis*, 31(4):1713–1733, October 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/4/1713.full.pdf+html>.

**Dussault:1998:APA**

- [607] Jean-Pierre P. Dussault. Augmented penalty algorithms. *IMA Journal of Numerical Analysis*, 18(3):355–372, July 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_03/180355.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_03/180355.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_03/pdf/180355.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_03/pdf/180355.pdf).

**Dusson:2017:PAN**

- [608] Geneviève Dusson and Yvon Maday. A *posteriori* analysis of a nonlinear Gross–Pitaevskii-type eigenvalue problem. *IMA Journal of Numerical Analysis*, 37(1):94–137, January 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/1/94/2669933>/A-posteriori-analysis-of-a-nonlinear-Gross.

**Dyn:1990:DDT**

- [609] Nira Dyn, David Levin, and Samuel Rippa. Data dependent triangulations for piecewise linear interpolation. *IMA Journal of Numerical Analysis*, 10(1):137–154, January 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Dziuk:2007:FEE**

- [610] G. Dziuk and C. M. Elliott. Finite elements on evolving surfaces. *IMA Journal of Numerical Analysis*, 27(2):262–292, April 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/2/262>; <http://imajna.oxfordjournals.org/cgi/reprint/27/2/262>.

**Dziuk:2012:RKT**

- [611] G. Dziuk, Ch. Lubich, and D. Mansour. Runge–Kutta time discretization of parabolic differential equations on evolving surfaces. *IMA Journal of Numerical Analysis*, 32(2):394–416, April 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/2/394.full.pdf+html>.

**Eastwood:1987:SBN**

- [612] James W. Eastwood and Wayne Arter. Spurious behaviour of numerically computed fluid flow. *IMA Journal of Numerical Analysis*, 7(2):205–222, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Ecevit:2019:GBH**

- [613] Fatih Ecevit and Hasan Hüseyin Eruslu. A Galerkin BEM for high-frequency scattering problems based on frequency-dependent changes of variables. *IMA Journal of Numerical Analysis*, 39(2):893–923, April 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/2/893/4836927>.

**Egger:2010:HMD**

- [614] Herbert Egger and Joachim Schöberl. A hybrid mixed discontinuous Galerkin finite-element method for convection–diffusion problems. *IMA Journal of Numerical Analysis*, 30(4):1206–1234, October 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/30/4/1206.full.pdf+html>.

**Egger:2013:HAH**

- [615] Herbert Egger and Christian Waluga. hp analysis of a hybrid DG method for Stokes flow. *IMA Journal of Numerical Analysis*, 33(2):687–721, April 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/2/687.full.pdf+html>.

**Egloff:2015:RWR**

- [616] A.-C. Egloff, A. Gloria, J.-C. Mourrat, and T. N. Nguyen. Random walk in random environment, corrector equation and homogenized coefficients: from theory to numerics, back and forth. *IMA Journal of Numerical Analysis*, 35(2):499–545, April 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/2/499>.

**Eibner:2006:LEA**

- [617] T. Eibner and J. M. Melenk. A local error analysis of the boundary-concentrated hp-FEM. *IMA Journal of Numerical Analysis*, 26(4):752–778, October 2006. CODEN IJNADH.

ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/26/4/752>; <http://imajna.oxfordjournals.org/cgi/reprint/26/4/752>.

**Eigel:2010:MFP**

- [618] M. Eigel, E. George, and M. Kirkilionis. A mesh-free partition of unity method for diffusion equations on complex domains. *IMA Journal of Numerical Analysis*, 30(3):629–653, July 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/3/629>; <http://imajna.oxfordjournals.org/cgi/reprint/30/3/629>.

**Eigel:2018:PEC**

- [619] Martin Eigel and Rüdiger Müller. A posteriori error control for stationary coupled bulk-surface equations. *IMA Journal of Numerical Analysis*, 38(1):271–298, January 25, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/1/271/3065607>.

**ElAlaoui:2007:PPA**

- [620] L. El Alaoui, A. Ern, and E. Burman. A priori and a posteriori analysis of non-conforming finite elements with face penalty for advection–diffusion equations. *IMA Journal of Numerical Analysis*, 27(1):151–171, January 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/1/151>; <http://imajna.oxfordjournals.org/cgi/content/abstract/27/1/151>;

oxfordjournals.org/cgi/reprint/  
27/1/151.

**El-Gebeily:1998:FDM**

- [621] M. A. El-Gebeily and I. T. Abu-Zaid. On a finite difference method for singular two-point boundary value problems. *IMA Journal of Numerical Analysis*, 18(2):179–190, April 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_02/180179.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_02/180179.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_02/pdf/180179.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_02/pdf/180179.pdf).

**ElTarazi:1985:EIM**

- [622] M. N. El Tarazi. Erratum: “Iterative methods for systems of first-order differential equations” [IMA J. Numer. Anal. 5 (1985), no. 1, 29–39; MR 86d:65087]. *IMA Journal of Numerical Analysis*, 5(4):503, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). See [623].

**ElTarazi:1985:IMS**

- [623] Mouhamed Nabih El Tarazi. Iterative methods for systems of first-order differential equations. *IMA Journal of Numerical Analysis*, 5(1):29–39, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). See erratum [622].

**ElTarazi:1986:MPA**

- [624] Mouhamed Nabih El Tarazi. On a monotony-preserving accelerator process for the successive approximations method. *IMA Journal of Numerical Analysis*, 6(4):439–446, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Ellacott:1981:CSA**

- [625] S. W. Ellacott. On the convergence of some approximate methods of conformal mappings. *IMA Journal of Numerical Analysis*, 1(2):185–192, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Ellacott:1983:CFE**

- [626] S. W. Ellacott and M. H. Gutknecht. The Carathéodory–Fejér extension of a finite geometric series. *IMA Journal of Numerical Analysis*, 3(2):221–227, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Ellacott:1983:PCF**

- [627] S. W. Ellacott and M. H. Gutknecht. The polynomial Carathéodory–Fejér approximation method for Jordan regions. *IMA Journal of Numerical Analysis*, 3(2):207–220, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Elliott:1985:COS**

- [628] C. M. Elliott. On the convergence of a one-step method for the numerical solution of an ordinary differential inclusion. *IMA Journal of Numerical Analysis*, 5(1):3–21, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Elliott:1987:EAE**

- [629] C. M. Elliott. Error analysis of the enthalpy method for the Stefan problem. *IMA Journal of Numerical Analysis*, 7(1):61–71, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Elliott:2005:FEA**

- [630] C. M. Elliott, D. Kay, and V. Styles. Finite element analysis of a current density–electric field formulation of Bean’s model for superconductivity. *IMA Journal of Numerical Analysis*, 25(1):182–204, January 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/25/1/182>; <http://imanum.oupjournals.org/cgi/reprint/25/1/182>.

**Elliott:2009:NAT**

- [631] C. M. Elliott and S. A. Smithe-man. Numerical analysis of the TV regularization and  $H_1$  fidelity model for decomposing an image into cartoon plus texture. *IMA Journal of Numerical Analysis*, 29(3):651–689, July 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/3/651>; <http://imajna.oxfordjournals.org/cgi/reprint/29/3/651>.

**Elliott:1981:FEA**

- [632] Charles M. Elliott. On the finite element approximation of an elliptic variational inequality arising from an implicit time discretization of the Stefan problem. *IMA Journal of Numerical Analysis*, 1(1):115–125, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Elliott:2017:ACS**

- [633] Charles M. Elliott and Hans Fritz. On approximations of the curve shortening flow and of the mean cur-

vature flow based on the DeTurck trick. *IMA Journal of Numerical Analysis*, 37(2):543–603, April 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/2/543/2669973>/On-approximations-of-the-curve-shortening-flow-and.

**Elliott:1983:EEF**

- [634] Charles M. Elliott and Vladimír Janovský. An error estimate for a finite-element approximation of an elliptic variational inequality formulation of a Hele–Shaw moving-boundary problem. *IMA Journal of Numerical Analysis*, 3(1):1–9, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Elliott:2007:FEA**

- [635] Charles M. Elliott and Yohei Kashima. A finite-element analysis of critical-state models for type-II superconductivity in 3D. *IMA Journal of Numerical Analysis*, 27(2):293–331, April 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/2/293>; <http://imajna.oxfordjournals.org/cgi/reprint/27/2/293>.

**Elliott:2013:FEA**

- [636] Charles M. Elliott and Thomas Ranner. Finite element analysis for a coupled bulk-surface partial differential equation. *IMA Journal of Numerical Analysis*, 33(2):377–402, April 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642

(electronic). URL <http://imajna.oxfordjournals.org/content/33/2/377.full.pdf+html>.

**Elliott:2011:NCA**

- [637] Charles M. Elliott, Björn Stinner, Vanessa Styles, and Richard Welford. Numerical computation of advection and diffusion on evolving diffuse interfaces. *IMA Journal of Numerical Analysis*, 31(3):786–812, July 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/3/786.full.pdf+html>.

**Elliott:2001:NAM**

- [638] Charles M. Elliott and Vanessa Styles. Numerical analysis of a mean field model of superconducting vortices. *IMA Journal of Numerical Analysis*, 21(1):1–51, January 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/210001.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210001.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/pdf/210001.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210001.pdf).

**Elliott:1993:AAT**

- [639] David Elliott. An asymptotic analysis of two algorithms for certain Hadamard finite-part integrals. *IMA Journal of Numerical Analysis*, 13(3):445–462, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Elman:2007:SSS**

- [640] Howard Elman and Darran Furnival. Solving the stochastic steady-state diffusion problem using multi-grid. *IMA Journal of Numerical*

*ical Analysis*, 27(4):675–688, October 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/4/675>; <http://imajna.oxfordjournals.org/cgi/reprint/27/4/675>.

**Elman:2016:EIA**

- [641] Howard C. Elman and Minghao W. Rostami. Efficient iterative algorithms for linear stability analysis of incompressible flows. *IMA Journal of Numerical Analysis*, 36(1):296–316, January 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/1/296>.

**Elschner:1997:QMS**

- [642] Johannes Elschner and Ivan G. Graham. Quadrature methods for Symm’s integral equation on polygons. *IMA Journal of Numerical Analysis*, 17(4):643–664, October 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_17/Issue\\_04/170643.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_04/170643.sgm.abs.html).

**Elster:1995:GAB**

- [643] Clemens Elster and Arnold Neumaier. A grid algorithm for bound constrained optimization of noisy functions. *IMA Journal of Numerical Analysis*, 15(4):585–608, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Engelborghs:1999:DCP**

- [644] K. Engelborghs, K. Lust, and D. Roose. Direct computation of period dou-

bling bifurcation points of large-scale systems of ODEs using a Newton–Picard method. *IMA Journal of Numerical Analysis*, 19(4):525–547, October 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_04/190525.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_04/190525.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_04/pdf/190525.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_04/pdf/190525.pdf).

**Erath:2019:AVC**

- [645] Christoph Erath and Dirk Praetorius. Adaptive vertex-centered finite volume methods for general second-order linear elliptic partial differential equations. *IMA Journal of Numerical Analysis*, 39(2):983–1008, April 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/2/983/4913310>.

**Erdogan:2019:NCE**

- [646] Utku Erdogan and Gabriel J Lord. A new class of exponential integrators for SDEs with multiplicative noise. *IMA Journal of Numerical Analysis*, 39(2):820–846, April 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/2/820/4955792>.

**Ern:2009:DGM**

- [647] Alexandre Ern, Annette F. Stephansen, and Paolo Zunino. A discontinuous Galerkin method with weighted averages for advection–diffusion equations with locally small and anisotropic diffusivity. *IMA Journal of Numerical Analysis*, 29(2):235–256, April

2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/2/235>; <http://imajna.oxfordjournals.org/cgi/reprint/29/2/235>.

**Ervedoza:2016:NME**

[648] Sylvain Ervedoza, Aurora Marica, and Enrique Zuazua. Numerical meshes ensuring uniform observability of one-dimensional waves: construction and analysis. *IMA Journal of Numerical Analysis*, 36(2):503–542, April 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/2/503>.

**Ervin:2006:ABE**

- [649] Vincent J. Ervin and Norbert Heuer. An adaptive boundary element method for the exterior Stokes problem in three dimensions. *IMA Journal of Numerical Analysis*, 26(2):297–325, April 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/26/2/297>; <http://imanum.oxfordjournals.org/cgi/reprint/26/2/297>.

**Escande:2016:FCL**

- [650] Adrien Escande. Fast closest logarithm algorithm in the special orthogonal group. *IMA Journal of Numerical Analysis*, 36(2):675–687, April 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/2/675>.



oxfordjournals.org/content/36/2/675.

**Esser:2015:ARF**

- [651] Patrick Esser and Jörg Grande. An accurate and robust finite element level set redistancing method. *IMA Journal of Numerical Analysis*, 35(4):1913–1933, October 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/4/1913>.

**Eymard:1998:EEA**

- [652] R. Eymard, T. Gallouët, M. Ghilani, and R. Herbin. Error estimates for the approximate solutions of a nonlinear hyperbolic equation given by finite volume schemes. *IMA Journal of Numerical Analysis*, 18(4):563–594, October 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_04/180563.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_04/180563.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_04/pdf/180563.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_04/pdf/180563.pdf).

**Eymard:2006:CCF**

- [653] R. Eymard, T. Gallouët, and R. Herbin. A cell-centred finite-volume approximation for anisotropic diffusion operators on unstructured meshes in any space dimension. *IMA Journal of Numerical Analysis*, 26(2):326–353, April 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/26/2/326>; <http://imanum.oxfordjournals.org/cgi/reprint/26/2/326>.

**Eymard:2010:DHA**

- [654] R. Eymard, T. Gallouët, and R. Herbin. Discretization of heterogeneous and anisotropic diffusion problems on general nonconforming meshes. Sushi: a scheme using stabilization and hybrid interfaces. *IMA Journal of Numerical Analysis*, 30(4):1009–1043, October 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/30/4/1009.full.pdf+html>.

**Eymard:2013:GOE**

- [655] R. Eymard, C. Guichard, and R. Masson. Grid orientation effect in coupled finite volume schemes. *IMA Journal of Numerical Analysis*, 33(2):582–608, April 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/2/582.full.pdf+html>.

**Eymard:2011:SFV**

- [656] Robert Eymard, Angela Handlovičová, and Karol Mikula. Study of a finite volume scheme for the regularized mean curvature flow level set equation. *IMA Journal of Numerical Analysis*, 31(3):813–846, July 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/3/813.full.pdf+html>.

**Ezquerro:2002:GDC**

- [657] J. A. Ezquerro and M. A. Hernández. Generalized differentiability conditions for Newton’s method. *IMA Journal of Numerical Analysis*, 22(2):

187–205, April 2002. CODEN IJ-NADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_02/220187.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_02/220187.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_02/pdf/220187.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_02/pdf/220187.pdf).

**Ezquerro:1997:MCM**

- [658] José A. Ezquerro. A modification of the Chebyshev method. *IMA Journal of Numerical Analysis*, 17(4):511–525, October 1997. CODEN IJ-NADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_17/Issue\\_04/170511.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_04/170511.sgm.abs.html).

**Fabiano:1995:FDA**

- [659] Richard H. Fabiano, Roger Knobel, and Bruce D. Lowe. A finite-difference algorithm for an inverse Sturm–Liouville problem. *IMA Journal of Numerical Analysis*, 15(1):75–88, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Faermann:2000:LAS**

- [660] Birgit Faermann. Localization of the Aronszajn–Slobodeckij norm and application to adaptive boundary elements methods. Part I. The two-dimensional case. *IMA Journal of Numerical Analysis*, 20(2):203–234, April 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_02/200203.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_02/200203.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_02/pdf/200203.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_02/pdf/200203.pdf).

**Fairweather:1991:BMN**

- [661] G. Fairweather and J. C. López Marcos. A box method for a nonlinear equation of population dynamics. *IMA Journal of Numerical Analysis*, 11(4):525–538, 1991. CODEN IJ-NADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Fairweather:1983:AED**

- [662] G. Fairweather and A. V. Saylor. On the application of extrapolation, deferred correction and defect correction to discrete-time Galerkin methods for parabolic problems. *IMA Journal of Numerical Analysis*, 3(2):173–192, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Falletta:2018:BCF**

- [663] S Falletta. BEM coupling with the FEM fictitious domain approach for the solution of the exterior Poisson problem and of wave scattering by rotating rigid bodies. *IMA Journal of Numerical Analysis*, 38(2):779–809, April 18, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/2/779/3749199>.

**Falletta:2014:STB**

- [664] S. Falletta, G. Monegato, and L. Scuderi. A space-time BIE method for wave equation problems: the (two-dimensional) Neumann case. *IMA Journal of Numerical Analysis*, 34(1):390–434, January 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oup.com/imajna/article/34/1/390/3749199>.

oxfordjournals.org/content/34/1/390.full.pdf+html.

**Falletta:2012:STB**

- [665] Silvia Falletta, Giovanni Monegato, and Letizia Scuderi. A space–time Bie method for nonhomogeneous exterior wave equation problems. The Dirichlet case. *IMA Journal of Numerical Analysis*, 32(1):202–226, January 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/1/202.full.pdf+html>.

**Faou:2009:GHW**

- [666] Erwan Faou and Vasile Gradinaru. Gauss–Hermite wave packet dynamics: convergence of the spectral and pseudo-spectral approximation. *IMA Journal of Numerical Analysis*, 29(4):1023–1045, October 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/4/1023>; <http://imajna.oxfordjournals.org/cgi/reprint/29/4/1023>.

**Faou:2018:CNG**

- [667] Erwan Faou and Tiphaine Jézéquel. Convergence of a normalized gradient algorithm for computing ground states. *IMA Journal of Numerical Analysis*, 38(1):360–376, January 25, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/1/360/3078587>.

**Faou:2015:AES**

- [668] Erwan Faou, Alexander Ostermann, and Katharina Schratz. Analy-

sis of exponential splitting methods for inhomogeneous parabolic equations. *IMA Journal of Numerical Analysis*, 35(1):161–178, January 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/1/161>.

**Farago:2009:CDP**

- [669] István Faragó and Róbert Horváth. Continuous and discrete parabolic operators and their qualitative properties. *IMA Journal of Numerical Analysis*, 29(3):606–631, July 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/3/606>; <http://imajna.oxfordjournals.org/cgi/reprint/29/3/606>.

**Farago:2012:DMP**

- [670] István Faragó, János Karátson, and Sergey Korotov. Discrete maximum principles for nonlinear parabolic PDE systems. *IMA Journal of Numerical Analysis*, 32(4):1541–1573, October 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/4/1541.full.pdf+html>.

**Farhloul:2001:RMF**

- [671] M. Farhloul, S. Nicaise, and L. Paquet. A refined mixed finite element method for the Boussinesq equations in polygonal domains. *IMA Journal of Numerical Analysis*, 21(2):525–551, April 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-

3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_02/210525.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_02/210525.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_02/pdf/210525.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_02/pdf/210525.pdf).

**Farhloul:1998:MFE**

- [672] Mohamed Farhloul. A mixed finite element method for a nonlinear Dirichlet problem. *IMA Journal of Numerical Analysis*, 18(1):121–132, January 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_01/180121.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_01/180121.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_01/pdf/180121.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_01/pdf/180121.pdf).

**Farhloul:2008:RMF**

- [673] Mohamed Farhloul, Serge Nicaise, and Luc Paquet. A refined mixed finite-element method for the stationary Navier–Stokes equations with mixed boundary conditions. *IMA Journal of Numerical Analysis*, 28(1):25–45, January 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/1/25>; <http://imajna.oxfordjournals.org/cgi/reprint/28/1/25>.

**Farmer:1985:MPM**

- [674] C. L. Farmer. A moving point method for arbitrary Peclet number multidimensional convection-diffusion equations. *IMA Journal of Numerical Analysis*, 5(4):465–480, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Farouki:2015:SPI**

- [675] Rida T. Farouki, Carla Manni, Maria Lucia Sampoli, and Alessandra Sestini. Shape-preserving interpolation of spatial data by Pythagorean-hodograph quintic spline curves. *IMA Journal of Numerical Analysis*, 35(1):478–498, January 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/1/478>.

**Farouki:2003:SPI**

- [676] Rida T. Farouki, Carla Manni, and Alessandra Sestini. Shape-preserving interpolation by  $G^1$  and  $G^2$  PH quintic splines. *IMA Journal of Numerical Analysis*, 23(2):175–195, April 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_02/230175.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_02/230175.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_02/pdf/230175.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_02/pdf/230175.pdf).

**Farouki:2016:TPS**

- [677] Rida T. Farouki, Francesca Pelosi, Maria Lucia Sampoli, and Alessandra Sestini. Tensor-product surface patches with Pythagorean-hodograph isoparametric curves. *IMA Journal of Numerical Analysis*, 36(3):1389–1409, July 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/3/1389>.

**Farrell:2017:MID**

- [678] Patricio Farrell, Kathryn Gillow, and Holger Wendland. Multilevel in-

- terpolation of divergence-free vector fields. *IMA Journal of Numerical Analysis*, 37(1):332–353, January 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/1/332/2669938/Multilevel-interpolation-of-divergence-free-vector>.
- [679] Paul A. Farrell. Sufficient conditions for uniform convergence of a class of difference schemes for a singularly perturbed problem. *IMA Journal of Numerical Analysis*, 7(4):459–472, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- [680] Dario Fasino and Gabriele Inglese. Discrete methods in the study of an inverse problem for Laplace’s equation. *IMA Journal of Numerical Analysis*, 19(1):105–118, January 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_01/190105.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_01/190105.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_01/pdf/190105.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_01/pdf/190105.pdf).
- [681] A. C. Faul, G. Goodsell, and M. J. D. Powell. A Krylov subspace algorithm for multiquadric interpolation in many dimensions. *IMA Journal of Numerical Analysis*, 25(1):1–24, January 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/25/1/1>; <http://imanum.oupjournals.org/cgi/reprint/25/1/1>.
- [682] Markus Faustmann, Jens Markus Melenk, and Dirk Praetorius. Existence of  $\mathcal{H}$ -matrix approximants to the inverse of BEM matrices: the hyper-singular integral operator. *IMA Journal of Numerical Analysis*, 37(3):1211–1244, July 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/3/1211/2669983/Existence-of-mathscr-H-matrix-approximants-to-the>.
- [683] Paola Favati and Beatrice Meini. On functional iteration methods for solving nonlinear matrix equations arising in queueing problems. *IMA Journal of Numerical Analysis*, 19(1):39–49, January 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_01/190039.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_01/190039.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_01/pdf/190039.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_01/pdf/190039.pdf).
- [684] Eduard Feireisl, Trygve Karper, and Antonín Novotný. A convergent numerical method for the Navier–Stokes–Fourier system. *IMA Journal of Numerical Analysis*, 36(4):1477–1535, October 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/4/1477>.
- [685] Miloslav Feistauer, Filip Roskovec, and

**Faustmann:2017:EHH****Farrell:1987:SCU****Fasino:1999:DMS****Faul:2005:KSA****Favati:1999:FIM****Feireisl:2016:CNM****Feistauer:2019:DGM**

Anna-Margarete Sändig. Discontinuous Galerkin method for an elliptic problem with nonlinear Newton boundary conditions in a polygon. *IMA Journal of Numerical Analysis*, 39(1): 423–453, January 25, 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/1/423/4656159>.

**Feldstein:1986:OUS**

- [686] Alan Feldstein and Peter Turner. Overflow, underflow, and severe loss of significance in floating-point addition and subtraction. *IMA Journal of Numerical Analysis*, 6(2):241–251, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Feng:1998:ADD**

- [687] Xiaobing Feng. Analysis of a domain decomposition method for the nearly elastic wave equations based on mixed finite element methods. *IMA Journal of Numerical Analysis*, 18(2): 229–250, April 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_02/180229.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_02/180229.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_02/pdf/180229.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_02/pdf/180229.pdf).

**Feng:2018:AMF**

- [688] Xiaobing Feng, Zhihao Ge, and Yukun Li. Analysis of a multiphysics finite element method for a poroelasticity model. *IMA Journal of Numerical Analysis*, 38(1):330–359, January 25, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/1/330/3078586>.

[oup.com/imajna/article/38/1/330/3078586](http://academic.oup.com/imajna/article/38/1/330/3078586).

**Feng:2015:ASI**

- [689] Xiaobing Feng and Yukun Li. Analysis of symmetric interior penalty discontinuous Galerkin methods for the Allen–Cahn equation and the mean curvature flow. *IMA Journal of Numerical Analysis*, 35(4):1622–1651, October 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/4/1622>.

**Feng:2004:PEE**

- [690] Xiaobing Feng and Zhenghui Xie. A priori error estimates for a coupled finite element method and mixed finite element method for a fluid–solid interaction problem. *IMA Journal of Numerical Analysis*, 24(4):671–698, October 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/24/4/671>; <http://imanum.oupjournals.org/cgi/reprint/24/4/671>.

**Fernandez:2016:CEA**

- [691] Miguel A. Fernández and Jimmy Mul-laert. Convergence and error analysis for a class of splitting schemes in incompressible fluid–structure interaction. *IMA Journal of Numerical Analysis*, 36(4):1748–1782, October 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/4/1748>.

**Ferreira:2009:LCN**

- [692] Orizon P. Ferreira. Local convergence of Newton's method in Banach space from the viewpoint of the majorant principle. *IMA Journal of Numerical Analysis*, 29(3):746–759, July 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/3/746>; <http://imajna.oxfordjournals.org/cgi/reprint/29/3/746>.

**Ferreira:2012:LCN**

- [693] Orizon P. Ferreira and Roberto C. M. Silva. Local convergence of Newton's method under a majorant condition in Riemannian manifolds. *IMA Journal of Numerical Analysis*, 32(4):1696–1713, October 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/4/1696.full.pdf+html>.

**Ferreira:2003:ANS**

- [694] Raúl Ferreira, Pablo Groisman, and Julio D. Rossi. Adaptive numerical schemes for a parabolic problem with blow-up. *IMA Journal of Numerical Analysis*, 23(3):439–463, July 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_03/drg006.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_03/drg006.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_03/pdf/drg006.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_03/pdf/drg006.pdf).

**Ferriss:1985:NSD**

- [695] D. H. Ferriss and D. W. Martin. Numerical solution of discrete Poisson-

Neumann problems with compatible or incompatible data, with reference to flow in a circular cavity. *IMA Journal of Numerical Analysis*, 5(1):79–100, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Fletcher:1985:EC**

- [696] R. Fletcher. Expected conditioning. *IMA Journal of Numerical Analysis*, 5(3):247–273, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Fletcher:1987:HMN**

- [697] R. Fletcher and C. Xu. Hybrid methods for nonlinear least squares. *IMA Journal of Numerical Analysis*, 7(3):371–389, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Fletcher:2017:ALB**

- [698] Roger Fletcher. Augmented Lagrangians, box constrained QP and extensions. *IMA Journal of Numerical Analysis*, 37(4):1635–1656, October 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/1635/3059683>.

**Fliege:1999:DPS**

- [699] Jörg Fliege and Ulrike Maier. The distribution of points on the sphere and corresponding cubature formulae. *IMA Journal of Numerical Analysis*, 19(2):317–334, April 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_02/190317.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_02/190317.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_02/190317.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_02/190317.pdf).

[//www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_02/pdf/190317.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_02/pdf/190317.pdf).

**Floater:2006:CCS**

- [700] Michael S. Floater. Chordal cubic spline interpolation is fourth-order accurate. *IMA Journal of Numerical Analysis*, 26(1):25–33, January 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/26/1/25>; <http://imanum.oxfordjournals.org/cgi/reprint/26/1/25>.

**Fonn:2015:HCA**

- [701] E. Fonn, P. Grohs, and R. Hiptmair. Hyperbolic cross approximation for the spatially homogeneous Boltzmann equation. *IMA Journal of Numerical Analysis*, 35(4):1533–1567, October 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/4/1533>.

**Fornberg:2008:LPR**

- [702] Bengt Fornberg, Natasha Flyer, Susan Hovde, and Cécile Piret. Locality properties of radial basis function expansion coefficients for equispaced interpolation. *IMA Journal of Numerical Analysis*, 28(1):121–142, January 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/1/121>; <http://imajna.oxfordjournals.org/cgi/reprint/28/1/121>.

**Fornberg:2010:CBP**

- [703] Bengt Fornberg, Natasha Flyer, and Jennifer M. Russell. Comparisons between pseudospectral and radial basis function derivative approximations. *IMA Journal of Numerical Analysis*, 30(1):149–172, January 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/1/149>; <http://imajna.oxfordjournals.org/cgi/reprint/30/1/149>.

**Foucart:2017:BCA**

- [704] Simon Foucart and Vladlena Powers. Basc: constrained approximation by semidefinite programming. *IMA Journal of Numerical Analysis*, 37(2):1066–1085, April 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/2/1066/2884284/Basc-constrained-approximation-by-semidefinite>.

**Fox:1981:NSI**

- [705] L. Fox and D. F. Mayers. On the numerical solution of implicit ordinary differential equations. *IMA Journal of Numerical Analysis*, 1(4):377–401, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Franca:2002:SRF**

- [706] Leopoldo P. Franca and Lutz Tobiska. Stability of the residual free bubble method for bilinear finite elements on rectangular grids. *IMA Journal of Numerical Analysis*, 22(1):73–87, January 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-



3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_01/220073.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_01/220073.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_01/pdf/220073.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_01/pdf/220073.pdf).

**Frank:2001:PIE**

- [707] J. E. Frank and P. J. Van Der Houwen. Parallel iteration of the extended backward differentiation formulas. *IMA Journal of Numerical Analysis*, 21(1):367–385, January 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/210367.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210367.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/pdf/210367.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210367.pdf).

**Frankel:1999:NTT**

- [708] J. I. Frankel and G. E. Osborne. A new time treatment for solving partial integro-differential equations of radiative transport. *IMA Journal of Numerical Analysis*, 19(1):91–103, January 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_01/190091.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_01/190091.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_01/pdf/190091.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_01/pdf/190091.pdf).

**Franz:2018:GDS**

- [709] Sebastian Franz, Katharina Höhne, and Gunar Matthies. Grad-div stabilized discretizations on  $S$ -type meshes for the Oseen problem. *IMA Journal of Numerical Analysis*, 38(1):299–329, January 25, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/1/299/3091689>.

<http://academic.oup.com/imajna/article/38/1/299/3091689>.

**Franz:2019:NMC**

- [710] Sebastian Franz, Sascha Trostorff, and Marcus Waurick. Numerical methods for changing type systems. *IMA Journal of Numerical Analysis*, 39(2):1009–1038, April 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/2/1009/4913313>.

**Freire:1999:NCD**

- [711] E. Freire, L. Pizarro, and A. J. Rodríguez-Luis. Numerical continuation of degenerate homoclinic orbits in planar systems. *IMA Journal of Numerical Analysis*, 19(1):51–75, January 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_01/190051.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_01/190051.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_01/pdf/190051.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_01/pdf/190051.pdf).

**Freitag:2008:TPI**

- [712] Melina A. Freitag and Alastair Spence. A tuned preconditioner for inexact inverse iteration applied to Hermitian eigenvalue problems. *IMA Journal of Numerical Analysis*, 28(3):522–551, July 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/3/522>; <http://imajna.oxfordjournals.org/cgi/reprint/28/3/522>.

**French:1994:LTB**

- [713] Donald A. French and Søren Jensen. Long-time behaviour of arbitrary order continuous time Galerkin schemes for some one-dimensional phase transition problems. *IMA Journal of Numerical Analysis*, 14(3):421–442, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Frittelli:2019:PIP**

- [714] Massimo Frittelli, Anotida Madzvamuse, Ivonne Sgura, and Chandrasekhar Venkataraman. Preserving invariance properties of reaction-diffusion systems on stationary surfaces. *IMA Journal of Numerical Analysis*, 39(1):235–270, January 25, 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/1/235/4568335>.

**Fritz:2013:IFE**

- [715] H. Fritz. Isoparametric finite element approximation of Ricci curvature. *IMA Journal of Numerical Analysis*, 33(4):1265–1290, October 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/4/1265.full.pdf+html>.

**Froese:2017:NMH**

- [716] Brittany D. Froese, Adam M. Oberman, and Tiago Salvador. Numerical methods for the 2-Hessian elliptic partial differential equation. *IMA Journal of Numerical Analysis*, 37(1):209–236, January 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

URL <https://academic.oup.com/imajna/article/37/1/209/2669939/Numerical-methods-for-the-2-Hessian-elliptic>.

**Fu:2019:PFS**

- [717] Guosheng Fu, Yanyi Jin, and Weifeng Qiu. Parameter-free superconvergent H(div)-conforming HDG methods for the Brinkman equations. *IMA Journal of Numerical Analysis*, 39(2):957–982, April 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/2/957/4857166>.

**Fuchs:1993:GNR**

- [718] P. M. Fuchs. A global negative result on algebraic stability and a special positive result on linear stability of generalized IRK methods. *IMA Journal of Numerical Analysis*, 13(4):571–589, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Fuhrer:2018:DMS**

- [719] Thomas Führer, Norbert Heuer, and Ernst P. Stephan. On the DPG method for Signorini problems. *IMA Journal of Numerical Analysis*, 38(4):1893–1926, October 16, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/4/1893/4260989>.

**Fulton:2014:ESD**

- [720] Charles Fulton, David Pearson, and Steven Pruess. Estimating spectral density functions for Sturm-Liouville problems with two singular endpoints. *IMA Journal of*

*Numerical Analysis*, 34(2):609–650, April 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/2/609.full.pdf+html>.

**Funaro:1990:CAP**

- [721] Daniele Funaro. Convergence analysis for pseudospectral multidomain approximations of linear advection equations. *IMA Journal of Numerical Analysis*, 10(1):63–74, January 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Fuselier:2017:RBF**

- [722] Edward J. Fuselier and Grady B. Wright. A radial basis function method for computing Helmholtz–Hodge decompositions. *IMA Journal of Numerical Analysis*, 37(2):774–797, April 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/2/774/2669992/A-radial-basis-function-method-for-computing>.

**Gabriel:2010:NAM**

- [723] J. Rigoberto Gabriel, Juan González-Hernández, and Raquiel R. López-Martínez. Numerical approximations to the mass transfer problem on compact spaces. *IMA Journal of Numerical Analysis*, 30(4):1121–1136, October 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/30/4/1121.full.pdf+html>.

**Gaier:1987:CTN**

- [724] D. Gaier and N. Papamichael. On the comparison of two numerical methods for conformal mapping. *IMA Journal of Numerical Analysis*, 7(3):261–282, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Gallistl:2015:MFE**

- [725] Dietmar Gallistl. Morley finite element method for the eigenvalues of the biharmonic operator. *IMA Journal of Numerical Analysis*, 35(4):1779–1811, October 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/4/1779>.

**Gallouet:2016:EEN**

- [726] Thierry Gallouët, Raphaële Herbin, David Maltese, and Antonin Novotny. Error estimates for a numerical approximation to the compressible barotropic Navier–Stokes equations. *IMA Journal of Numerical Analysis*, 36(2):543–592, April 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/2/543>.

**Ganesh:2012:CAP**

- [727] M. Ganesh, S. C. Hawkins, and R. Hiptmair. Convergence analysis with parameter estimates for a reduced basis acoustic scattering  $T$ -matrix method. *IMA Journal of Numerical Analysis*, 32(4):1348–1374, October 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/4/1348.full.pdf+html>.

oxfordjournals.org/content/32/4/1348.full.pdf+html.

**Ganesh:1991:NSH**

- [728] M. Ganesh and M. C. Joshi. Numerical solvability of Hammerstein integral equations of mixed type. *IMA Journal of Numerical Analysis*, 11(1):21–31, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Ganesh:1998:OCN**

- [729] M. Ganesh and A. Spence. Orthogonal collocation for a nonlinear integro-differential equation. *IMA Journal of Numerical Analysis*, 18(2):191–206, April 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_02/180191.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_02/180191.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_02/pdf/180191.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_02/pdf/180191.pdf).

**Gantner:2018:ROA**

- [730] Gregor Gantner, Alexander Haberl, Dirk Praetorius, and Bernhard Stifter. Rate optimal adaptive FEM with inexact solver for nonlinear operators. *IMA Journal of Numerical Analysis*, 38(4):1797–1831, October 16, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/4/1797/4158785>.

**Garau:2011:CQO**

- [731] Eduardo M. Garau and Pedro Morin. Convergence and quasi-optimality of adaptive FEM for Steklov eigenvalue problems. *IMA Journal of Numerical Analysis*, 31(3):914–946, July 2011. CODEN IJNADH.

ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/3/914.full.pdf+html>.

**Garay:1998:DFD**

- [732] Barnabas M. Garay. The discretized flow on domains of attraction: a structural stability result. *IMA Journal of Numerical Analysis*, 18(1):77–90, January 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_01/180077.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_01/180077.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_01/pdf/180077.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_01/pdf/180077.pdf).

**Garay:2001:NFB**

- [733] Barnabas M. Garay and Peter L. Simon. Numerical flow-box theorems under structural assumptions. *IMA Journal of Numerical Analysis*, 21(3):733–749, July 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_03/210733.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_03/210733.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_03/pdf/210733.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_03/pdf/210733.pdf).

**Garcia:2017:FES**

- [734] Carlos García, Gabriel N. Gatica, and Salim Meddahi. Finite element semidiscretization of a pressure-stress formulation for the time-domain fluid-structure interaction problem. *IMA Journal of Numerical Analysis*, 37(4):1772–1799, October 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/1772/3038030>.

**García-Archilla:1995:ASC**

- [735] B. García-Archilla and J. A. Mackenzie. Analysis of a supraconvergent cell vertex finite-volume method for one-dimensional convection-diffusion problems. *IMA Journal of Numerical Analysis*, 15(1):101–115, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**García-Archilla:1995:TIN**

- [736] Bosco García-Archilla and Javier de Frutos. Time integration of the nonlinear Galerkin method. *IMA Journal of Numerical Analysis*, 15(2):221–244, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Gardini:2018:VEM**

- [737] Francesca Gardini and Giuseppe Vacca. Virtual element method for second-order elliptic eigenvalue problems. *IMA Journal of Numerical Analysis*, 38(4):2026–2054, October 16, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/4/2026/4602859>.

**Garralda-Guillem:2014:PEA**

- [738] Ana I. Garralda-Guillem, Manuel Ruiz Galán, Gabriel N. Gatica, and Antonio Márquez. A posteriori error analysis of twofold saddle point variational formulations for nonlinear boundary value problems. *IMA Journal of Numerical Analysis*, 34(1):326–361, January 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/1/326.full.pdf+html>.

**Gartland:1989:CHO**

- [739] Eugene C. Gartland, Jr. Compact high-order finite differences for interface problems in one dimension. *IMA Journal of Numerical Analysis*, 9(2):243–260, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Gaspoz:2016:OGN**

- [740] Fernando D. Gaspoz, Claus-Justus Heine, and Kunibert G. Siebert. Optimal grading of the newest vertex bisection and  $H^1$ -stability of the  $L_2$ -projection. *IMA Journal of Numerical Analysis*, 36(3):1217–1241, July 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/3/1217>.

**Gaspoz:2009:CRA**

- [741] Fernando D. Gaspoz and Pedro Morin. Convergence rates for adaptive finite elements. *IMA Journal of Numerical Analysis*, 29(4):917–936, October 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/4/917>; <http://imajna.oxfordjournals.org/cgi/reprint/29/4/917>.

**Gaspoz:2019:CTS**

- [742] Fernando D Gaspoz, Kunibert Siebert, Christian Kreuzer, and Daniel A Ziegler. A convergent time-space adaptive  $dG(s)$  finite element method for parabolic problems motivated by equal error distribution. *IMA Journal of Numerical Analysis*, 39(2):650–

686, April 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/2/650/4960122>.

**Gass:2019:PIM**

- [743] Maximilian Gaß and Kathrin Glau. Parametric integration by magic point empirical interpolation. *IMA Journal of Numerical Analysis*, 39(1):315–341, January 25, 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/1/315/4774576>.

**Gastaldi:1994:DDT**

- [744] Fabio Gastaldi and Lucia Gastaldi. On a domain decomposition for the transport equation: theory and finite element approximation. *IMA Journal of Numerical Analysis*, 14(1):111–135, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Gastaldo:2011:DPM**

- [745] Laura Gastaldo, Raphaële Herbin, and Jean-Claude Latché. A discretization of the phase mass balance in fractional step algorithms for the drift-flux model. *IMA Journal of Numerical Analysis*, 31(1):116–146, January 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/1/116.full.pdf+html>.

**Gatica:2003:NAN**

- [746] Gabriel N. Gatica, Norbert Heuer, and Salim Meddahi. On the numerical analysis of nonlinear twofold

saddle point problems. *IMA Journal of Numerical Analysis*, 23(2):301–330, April 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_02/230301.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_02/230301.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_02/pdf/230301.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_02/pdf/230301.pdf).

**Gatica:2012:FEA**

- [747] Gabriel N. Gatica and Salim Meddahi. Finite element analysis of a time harmonic Maxwell problem with an impedance boundary condition. *IMA Journal of Numerical Analysis*, 32(2):534–552, April 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/2/534.full.pdf+html>.

**Gatica:2009:CMF**

- [748] Gabriel N. Gatica, Salim Meddahi, and Ricardo Oyarzúa. A conforming mixed finite-element method for the coupling of fluid flow with porous media flow. *IMA Journal of Numerical Analysis*, 29(1):86–108, January 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Gatica:2012:TSP**

- [749] Gabriel N. Gatica, Ricardo Oyarzúa, and Francisco-Javier Sayas. A twofold saddle point approach for the coupling of fluid flow with nonlinear porous media flow. *IMA Journal of Numerical Analysis*, 32(3):845–887, July 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/3/845.full.pdf+html>.

oxfordjournals.org/content/32/3/845.full.pdf+html.

**Gauckler:2011:CSS**

- [750] Ludwig Gauckler. Convergence of a split-step Hermite method for the Gross–Pitaevskii equation. *IMA Journal of Numerical Analysis*, 31(2):396–415, April 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/2/396.full.pdf+html>.

**Gauckler:2017:NLT**

- [751] Ludwig Gauckler. Numerical long-time energy conservation for the nonlinear Schrödinger equation. *IMA Journal of Numerical Analysis*, 37(4):2067–2090, October 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/2067/2670309>.

**Gavrilyuk:2007:ECP**

- [752] I. P. Gavrilyuk, A. V. Klimenko, V. L. Makarov, and N. O. Rossokhata. Exponentially convergent parallel algorithm for nonlinear eigenvalue problems. *IMA Journal of Numerical Analysis*, 27(4):818–838, October 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/4/818>; <http://imajna.oxfordjournals.org/cgi/reprint/27/4/818>.

**Gensun:2005:CDR**

- [753] Fang Gensun and Ye Peixin. Complexity of deterministic and randomized

methods for multivariate integration problems for the class  $H_p^\Lambda(I^d)$ . *IMA Journal of Numerical Analysis*, 25(3):473–485, July 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/25/3/473>; <http://imanum.oxfordjournals.org/cgi/reprint/25/3/473>.

**Georgoulis:2019:PEB**

- [754] Emmanuil H. Georgoulis, Edward Hall, and Charalambos Makridakis. An a posteriori error bound for discontinuous Galerkin approximations of convection-diffusion problems. *IMA Journal of Numerical Analysis*, 39(1):34–60, January 25, 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/1/34/4772755>.

**Georgoulis:2009:DGM**

- [755] Emmanuil H. Georgoulis and Paul Houston. Discontinuous Galerkin methods for the biharmonic problem. *IMA Journal of Numerical Analysis*, 29(3):573–594, July 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/3/573>; <http://imajna.oxfordjournals.org/cgi/reprint/29/3/573>.

**Georgoulis:2011:PEI**

- [756] Emmanuil H. Georgoulis, Paul Houston, and Juha Virtanen. An a posteriori error indicator for discontinuous Galerkin approximations of fourth-order elliptic problems. *IMA Jour-*

*nal of Numerical Analysis*, 31(1):281–298, January 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/1/281.full.pdf+html>.

**Georgoulis:2013:PEB**

- [757] Emmanuil H. Georgoulis, Omar Lakkis, and Charalambos Makridakis. A posteriori  $L^\infty(L^2)$ -error bounds for finite element approximations to the wave equation. *IMA Journal of Numerical Analysis*, 33(4):1245–1264, October 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/4/1245.full.pdf+html>.

**Georgoulis:2006:NDH**

- [758] Emmanuil H. Georgoulis and Andris Lasis. A note on the design of  $hp$ -version interior penalty discontinuous Galerkin finite element methods for degenerate problems. *IMA Journal of Numerical Analysis*, 26(2):381–390, April 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/26/2/381>; <http://imanum.oxfordjournals.org/cgi/reprint/26/2/381>.

**Georgoulis:2005:OEE**

- [759] Emmanuil H. Georgoulis and Endre Süli. Optimal error estimates for the  $hp$ -version interior penalty discontinuous Galerkin finite element method. *IMA Journal of Numerical Analysis*, 25(1):205–220, January 2005. CODEN IJNADH. ISSN 0272-

4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/25/1/205>; <http://imanum.oupjournals.org/cgi/reprint/25/1/205>.

**Gerisch:2010:AE**

- [760] A. Gerisch. On the approximation and efficient evaluation of integral terms in PDE models of cell adhesion. *IMA Journal of Numerical Analysis*, 30(1):173–194, January 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/1/173>; <http://imajna.oxfordjournals.org/cgi/reprint/30/1/173>.

**Gerrard:1984:APC**

- [761] C. Gerrard and K. Wright. Asymptotic properties of collocation matrix norms. II. Piecewise polynomial approximation. *IMA Journal of Numerical Analysis*, 4(3):363–373, July 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Gervais:2002:NSC**

- [762] Jean-Jacques Gervais and Hassan Sadiky. A new steplength control for continuation with the asymptotic numerical method. *IMA Journal of Numerical Analysis*, 22(2):207–229, April 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_02/220207.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_02/220207.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_02/pdf/220207.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_02/pdf/220207.pdf).



**Ghelardoni:2003:NSL**

- [763] P. Ghelardoni, G. Gheri, and M. Marletta. Numerical solution of a  $\lambda$ -rational Sturm–Liouville problem. *IMA Journal of Numerical Analysis*, 23(1):29–53, January 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_01/230029.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_01/230029.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_01/pdf/230029.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_01/pdf/230029.pdf).

**Ghosh:2016:FBF**

- [764] Aditi Ghosh and Prabir Daripa. The FFTRR-based fast decomposition methods for solving complex biharmonic problems and incompressible flows. *IMA Journal of Numerical Analysis*, 36(2):824–850, April 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/2/824>.

**Giesselmann:2015:LMA**

- [765] Jan Giesselmann. Low Mach asymptotic-preserving scheme for the Euler–Korteweg model. *IMA Journal of Numerical Analysis*, 35(2):802–833, April 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/2/802>.

**Giesselmann:2016:RRE**

- [766] Jan Giesselmann and Tristan Pryer. Reduced relative entropy techniques for a posteriori analysis of multiphase problems in elastodynamics. *IMA Journal of Numerical*

*cal Analysis*, 36(4):1685–1714, October 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/4/1685>.

**Gil:2011:FAC**

- [767] Amparo Gil, Javier Segura, and Nico M. Temme. Fast and accurate computation of the Weber parabolic cylinder function  $W(a, x)$ . *IMA Journal of Numerical Analysis*, 31(3):1194–1216, July 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/3/1194.full.pdf+html>.

**Gilbert:1990:ESI**

- [768] J. Gilbert and W. A. Light. Envelope solutions for implicit ordinary differential equations. *IMA Journal of Numerical Analysis*, 10(1):49–61, January 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Giles:1997:SCD**

- [769] M. B. Giles. On the stability and convergence of discretizations of initial value p.d.e.s. *IMA Journal of Numerical Analysis*, 17(4):563–576, October 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_17/Issue\\_04/170563.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_04/170563.sgm.abs.html).

**Gill:2017:SSM**

- [770] Philip E. Gill, Vyacheslav Kungurtsev, and Daniel P. Robinson. A stabilized SQP method: global convergence. *IMA Journal of Numerical Analysis*, 37(1):407–443, January

1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/1/407/2669936/A-stabilized-SQP-method-global-convergence>.

**Giraud:2002:WMG**

- [771] L. Giraud and J. Langou. When modified Gram–Schmidt generates a well-conditioned set of vectors. *IMA Journal of Numerical Analysis*, 22(4): 521–528, October 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_04/220521.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_04/220521.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_04/pdf/220521.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_04/pdf/220521.pdf).

**Giraud:1999:SCP**

- [772] Luc Giraud and Ray S. Tuminaro. Schur complement preconditioners for anisotropic problems. *IMA Journal of Numerical Analysis*, 19(1): 1–18, January 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_01/190001.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_01/190001.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_01/pdf/190001.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_01/pdf/190001.pdf).

**Girault:2004:DDM**

- [773] V. Girault, R. Glowinski, and H. López. A domain decomposition and mixed method for a linear parabolic boundary value problem. *IMA Journal of Numerical Analysis*, 24(3):491–520, July 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_03/240491.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_03/240491.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_03/pdf/240491.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_03/pdf/240491.pdf).

[http://www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_03/pdf/240491.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_03/pdf/240491.pdf).

**Girault:1996:FEE**

- [774] V. Girault and H. Lopez. Finite-element error estimates for the MAC scheme. *IMA Journal of Numerical Analysis*, 16(3):347–379, July 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_16/Issue\\_03/160347.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_03/160347.sgm.abs.html).

**Gittelsohn:2012:RGF**

- [775] Claude Jeffrey Gittelsohn. Representation of Gaussian fields in series with independent coefficients. *IMA Journal of Numerical Analysis*, 32(1):294–319, January 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/1/294.full.pdf+html>.

**Gladwell:1990:EMS**

- [776] I. Gladwell and R. M. Thomas. Efficiency of methods for second-order problems. *IMA Journal of Numerical Analysis*, 10(2):181–207, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Glaister:1988:SRP**

- [777] P. Glaister. A shock-reflection problem in compressible-gas dynamics with a similarity solution. *IMA Journal of Numerical Analysis*, 8(3):343–356, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Glowinski:1984:FEA**

- [778] R. Glowinski, L. D. Marini, and M. Vidrascu. Finite-element approximations and iterative solutions of a fourth-order elliptic variational inequality. *IMA Journal of Numerical Analysis*, 4(2):127–167, April 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Glunt:1995:APM**

- [779] William K. Glunt. An alternating projections method for certain linear problems in a Hilbert space. *IMA Journal of Numerical Analysis*, 15(2):291–305, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**GmeligMeyling:1987:BSA**

- [780] R. H. J. Gmelig Meyling and P. R. Pfluger. B-spline approximation of a closed surface. *IMA Journal of Numerical Analysis*, 7(1):73–96, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Goda:2017:OOQ**

- [781] Takashi Goda, Kosuke Suzuki, and Takehito Yoshiki. Optimal order quasi-Monte Carlo integration in weighted Sobolev spaces of arbitrary smoothness. *IMA Journal of Numerical Analysis*, 37(1):505–518, January 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/1/505/2669950/Optimal-order-quasi-Monte-Carlo-integration-in>.

**Goldfarb:2008:NSL**

- [782] D. Goldfarb and K. Scheinberg. Numerically stable  $LDL^T$  factorizations

in interior point methods for convex quadratic programming. *IMA Journal of Numerical Analysis*, 28(4):806–826, October 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/4/806>.

**Golub:2009:QAY**

- [783] Gene Golub and Frank Uhlig. The QR algorithm: 50 years later its genesis by John Francis and Vera Kublanovskaya and subsequent developments. *IMA Journal of Numerical Analysis*, 29(3):467–485, July 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/3/467>; <http://imajna.oxfordjournals.org/cgi/reprint/29/3/467>.

**Gonzalez:1999:QPM**

- [784] O. Gonzalez, D. J. Higham, and A. M. Stuart. Qualitative properties of modified equations. *IMA Journal of Numerical Analysis*, 19(2):169–190, April 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_02/190169.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_02/190169.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_02/pdf/190169.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_02/pdf/190169.pdf).

**Goodman:1998:LPA**

- [785] Tim N. T. Goodman, Charles A. Michelli, Giuseppe Rodriguez, and Sebastiano Seatzu. On the limiting profile arising from orthonormalizing shifts of exponentially decaying functions. *IMA Journal of Numerical Analysis*,

18(3):331–354, July 1998. CODEN IJ-NADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_03/180331.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_03/180331.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_03/pdf/180331.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_03/pdf/180331.pdf).

**Gould:1991:ALS**

- [789] Nicholas I. M. Gould. An algorithm for large-scale quadratic programming. *IMA Journal of Numerical Analysis*, 11(3):299–324, 1991. CODEN IJ-NADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Goodsell:1997:MTM**

- [786] George Goodsell. A multigrid-type method for thin plate spline interpolation on a circle. *IMA Journal of Numerical Analysis*, 17(2):321–327, April 1997. CODEN IJ-NADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_17/Issue\\_02/170321.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_02/170321.sgm.abs.html).

**Gould:2012:SDS**

- [790] Nicholas I. M. Gould and Daniel P. Robinson. A second-derivative SQP method with a ‘trust-region-free’ predictor step. *IMA Journal of Numerical Analysis*, 32(2):580–601, April 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/2/580.full.pdf+html>.

**Gopalakrishnan:2012:SEE**

- [787] J. Gopalakrishnan and J. Guzmán. A second elasticity element using the matrix bubble. *IMA Journal of Numerical Analysis*, 32(1):352–372, January 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/1/352.full.pdf+html>.

**Gould:1986:ADS**

- [791] Nicholas Ian Mark Gould. On the accurate determination of search directions for simple differentiable penalty functions. *IMA Journal of Numerical Analysis*, 6(3):357–372, 1986. CODEN IJ-NADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Gourlay:1981:LCG**

- [792] A. R. Gourlay and J. Ll. Morris. Linear combinations of generalized Crank–Nicolson schemes. *IMA Journal of Numerical Analysis*, 1(3):347–357, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Gordon:2012:SSC**

- [788] Andrew D. Gordon and Catherine E. Powell. On solving stochastic collocation systems with algebraic multigrid. *IMA Journal of Numerical Analysis*, 32(3):1051–1070, July 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/3/1051.full.pdf+html>.

**Gout:1985:RWT**

- [793] J.-L. Gout. Rational Wachspress-type finite elements on regular hexagons. *IMA Journal of Numerical Analysis*, 5(1):59–77, 1985. CODEN IJ-

NADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Govaerts:1993:MBE**

- [794] W. Govaerts and J. D. Pryce. Mixed block elimination for linear systems with wider borders. *IMA Journal of Numerical Analysis*, 13(2):161–180, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Gover:1985:ITM**

- [795] M. J. C. Gover and S. Barnett. Inversion of Toeplitz matrices which are not strongly nonsingular. *IMA Journal of Numerical Analysis*, 5(1):101–110, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Graham:2005:FED**

- [796] I. G. Graham, W. Hackbusch, and S. A. Sauter. Finite elements on degenerate meshes: inverse-type inequalities and applications. *IMA Journal of Numerical Analysis*, 25(2):379–407, April 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/25/2/379>; <http://imanum.oupjournals.org/cgi/reprint/25/2/379>.

**Graham:1993:SIA**

- [797] Ivan G. Graham and Kendall E. Atkinson. On the Sloan iteration applied to integral equations of the first kind. *IMA Journal of Numerical Analysis*, 13(1):29–41, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Graham:1985:IGV**

- [798] Ivan G. Graham, Stephen Joe, and Ian H. Sloan. Iterated Galerkin versus iterated collocation for integral equations of the second kind. *IMA Journal of Numerical Analysis*, 5(3):355–369, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Graham:1989:NPI**

- [799] Ivan G. Graham and Wendy R. Mendes. Nyström-product integration for Wiener–Hopf equations with applications to radiative transfer. *IMA Journal of Numerical Analysis*, 9(2):261–284, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Grant:1983:DZL**

- [800] J. A. Grant and A. Ghiatis. Determination of the zeros of a linear combination of Chebyshev polynomials. *IMA Journal of Numerical Analysis*, 3(2):193–206, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Graser:2019:DEE**

- [801] Carsten Gräser and Tobias Kies. Discretization error estimates for penalty formulations of a linearized Canham–Helfrich-type energy. *IMA Journal of Numerical Analysis*, 39(2):626–649, April 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/2/626/4788734>.

**Graser:2013:TDA**

- [802] Carsten Gräser, Ralf Kornhuber, and Uli Sack. Time discretiza-

tions of anisotropic Allen–Cahn equations. *IMA Journal of Numerical Analysis*, 33(4):1226–1244, October 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/4/1226.full.pdf+html>.

**Graser:2015:NSN**

- [803] Carsten Gräser, Ralf Kornhuber, and Uli Sack. Nonsmooth Schur–Newton methods for multicomponent Cahn–Hilliard systems. *IMA Journal of Numerical Analysis*, 35(2):652–679, April 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/2/652>.

**Graser:2019:TNN**

- [804] Carsten Gräser and Oliver Sander. Truncated nonsmooth Newton multigrid methods for block-separable minimization problems. *IMA Journal of Numerical Analysis*, 39(1):454–481, January 25, 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/1/454/5153291>.

**Gratton:2008:RTR**

- [805] Serge Gratton, Mélodie Mouffe, Philippe L. Toint, and Melissa Weber-Mendonça. A recursive-trust-region method for bound-constrained nonlinear optimization. *IMA Journal of Numerical Analysis*, 28(4):827–861, October 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/4/827>.

[oxfordjournals.org/cgi/content/abstract/28/4/827](http://imajna.oxfordjournals.org/cgi/content/abstract/28/4/827).

**Gratton:2018:CGR**

- [806] Serge Gratton, Clément W. Royer, Luís N. Vicente, and Zaikun Zhang. Complexity and global rates of trust-region methods based on probabilistic models. *IMA Journal of Numerical Analysis*, 38(3):1579–1597, July 17, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/3/1579/4084726>.

**Graves-Morris:1984:VVR**

- [807] P. R. Graves-Morris. Vector-valued rational interpolants. II. *IMA Journal of Numerical Analysis*, 4(2):209–224, April 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Greenberg:1995:OTN**

- [808] Leon Greenberg and Marco Marletta. Oscillation theory and numerical solution of fourth-order Sturm–Liouville problems. *IMA Journal of Numerical Analysis*, 15(3):319–356, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Gregory:1982:PRQ**

- [809] J. A. Gregory and R. Delbourgo. Piecewise rational quadratic interpolation to monotonic data. *IMA Journal of Numerical Analysis*, 2(2):123–130, April 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Griebel:2014:ABV**

- [810] Michael Griebel and Helmut Harbrecht. Approximation of bi-variate functions: singular value decomposition versus sparse grids. *IMA Journal of Numerical Analysis*, 34(1):28–54, January 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/1/28.full.pdf+html>.

**Griewank:1983:CHP**

- [811] A. Griewank and G. Reddien. The calculation of Hopf points by a direct method. *IMA Journal of Numerical Analysis*, 3(3):295–303, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Griffiths:1988:SPB**

- [812] D. F. Griffiths and A. R. Mitchell. Stable periodic bifurcations of an explicit discretization of a nonlinear partial differential equation in reaction diffusion. *IMA Journal of Numerical Analysis*, 8(4):435–454, October 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Griffiths:1992:SAN**

- [813] D. F. Griffiths, P. K. Sweby, and H. C. Yee. On spurious asymptotic numerical solutions of explicit Runge–Kutta methods. *IMA Journal of Numerical Analysis*, 12(3):319–338, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). IMA Conference on Dynamics of Numerics and Numerics of Dynamics (Bristol, 1990).

**Griffiths:2010:ARM**

- [814] David F. Griffiths and Chus (J. M.) Sanz-Serna. Andrew Ronald Mitchell. *IMA Journal of Numerical Analysis*, 30(1):1–3, January 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/reprint/30/1/1>.

**Grindrod:2010:PR**

- [815] Peter Grindrod, Desmond J. Higham, and Gabriela Kalna. Periodic re-ordering. *IMA Journal of Numerical Analysis*, 30(1):195–207, January 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/1/195>; <http://imajna.oxfordjournals.org/cgi/reprint/30/1/195>.

**Grohs:2016:NTR**

- [816] P. Grohs and S. Hosseini. Non-smooth trust region algorithms for locally Lipschitz functions on Riemannian manifolds. *IMA Journal of Numerical Analysis*, 36(3):1167–1192, July 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/3/1167>.

**Grohs:2009:SIM**

- [817] Philipp Grohs. Smoothness of interpolatory multivariate subdivision in Lie groups. *IMA Journal of Numerical Analysis*, 29(3):760–772, July 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642

(electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/3/760>; <http://imajna.oxfordjournals.org/cgi/reprint/29/3/760>.

**Grossmann:1986:FGG**

- [818] Ch. Grossmann and H.-G. Roos. Feed-back grid generation via monotone discretization for two-point boundary-value problems. *IMA Journal of Numerical Analysis*, 6(4):421–432, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Grote:2008:IPD**

- [819] Marcus J. Grote, Anna Schneebeli, and Dominik Schötzau. Interior penalty discontinuous Galerkin method for Maxwell's equations: optimal  $L^2$ -norm error estimates. *IMA Journal of Numerical Analysis*, 28(3):440–468, July 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/3/440>; <http://imajna.oxfordjournals.org/cgi/reprint/28/3/440>.

**Grothaus:2016:NPD**

- [820] Martin Grothaus and Nicole Marheineke. On a nonlinear partial differential algebraic system arising in the technical textile industry: analysis and numerics. *IMA Journal of Numerical Analysis*, 36(4):1783–1803, October 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/4/1783>.

**Grune:2001:PAO**

- [821] Lars Grüne. Persistence of attractors for one-step discretization of ordinary differential equations. *IMA Journal of Numerical Analysis*, 21(3):751–767, July 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_03/210751.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_03/210751.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_03/pdf/210751.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_03/pdf/210751.pdf).

**Guan:2012:ACS**

- [822] Qingguang Guan, Ran Zhang, and Yongkui Zou. Analysis of collocation solutions for nonstandard Volterra integral equations. *IMA Journal of Numerical Analysis*, 32(4):1755–1785, October 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/4/1755.full.pdf+html>.

**Gudi:2011:IPM**

- [823] Thirupathi Gudi and Michael Neilan. An interior penalty method for a sixth-order elliptic equation. *IMA Journal of Numerical Analysis*, 31(4):1734–1753, October 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/4/1734.full.pdf+html>.

**Guermond:2001:SSG**

- [824] J.-L. Guermond. Subgrid stabilization of Galerkin approximations of linear monotone operators. *IMA Journal of Numerical Analysis*, 21(1):165–197, January 2001. CODEN IJ-



NADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/210165.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210165.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/pdf/210165.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210165.pdf).

**Guermond:2009:LCF**

- [825] J.-L. Guermond. The LBB condition in fractional Sobolev spaces and applications. *IMA Journal of Numerical Analysis*, 29(3):790–805, July 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/3/790>; <http://imajna.oxfordjournals.org/cgi/reprint/29/3/790>.

**Guglielmi:2003:SOL**

- [826] N. Guglielmi and M. Zennaro. Stability of one-leg  $\Theta$ -methods for the variable coefficient pantograph equation on the quasi-geometric mesh. *IMA Journal of Numerical Analysis*, 23(3):421–438, July 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_03/drg005.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_03/drg005.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_03/pdf/drg005.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_03/pdf/drg005.pdf).

**Guglielmi:1998:DDS**

- [827] Nicola Guglielmi. Delay dependent stability regions of  $\Theta$ -methods for delay differential equations. *IMA Journal of Numerical Analysis*, 18(3):399–418, July 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_03/180399.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_03/180399.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_03/pdf/180399.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_03/pdf/180399.pdf).

[http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_03/pdf/180399.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_03/pdf/180399.pdf).

**Guglielmi:2006:SPC**

- [828] Nicola Guglielmi. Short proofs and a counterexample for analytical and numerical stability of delay equations with infinite memory. *IMA Journal of Numerical Analysis*, 26(1):60–77, January 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/26/1/60>; <http://imanum.oxfordjournals.org/cgi/reprint/26/1/60>.

**Guglielmi:2001:GPN**

- [829] Nicola Guglielmi and Ernst Hairer. Geometric proofs of numerical stability for delay equations. *IMA Journal of Numerical Analysis*, 21(1):439–450, January 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/210439abs.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210439abs.pdf); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/pdf/210439.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210439.pdf).

**Guglielmi:2015:ARS**

- [830] Nicola Guglielmi and Manuela Manetta. Approximating real stability radii. *IMA Journal of Numerical Analysis*, 35(3):1402–1425, July 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/3/1402>.

**Guillen-Gonzalez:2011:NEE**

- [831] F. Guillén-González and M. V. Redondo-Neble. New error esti-

mates for a viscosity-splitting scheme in time for the three-dimensional Navier–Stokes equations. *IMA Journal of Numerical Analysis*, 31(2):556–579, April 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/2/556.full.pdf+html>.

**Guo:1985:SMS**

- [832] Ben Yu Guo and V. S. Manoranjan. A spectral method for solving the RLW equation. *IMA Journal of Numerical Analysis*, 5(3):307–318, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Guo:2003:QME**

- [833] Chun-Hua Guo. On a quadratic matrix equation associated with an  $M$ -matrix. *IMA Journal of Numerical Analysis*, 23(1):11–27, January 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_01/230011.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_01/230011.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_01/pdf/230011.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_01/pdf/230011.pdf).

**Guo:2015:PED**

- [834] Chun-Hua Guo, Changli Liu, and Jungong Xue. Performance enhancement of doubling algorithms for a class of complex nonsymmetric algebraic Riccati equations. *IMA Journal of Numerical Analysis*, 35(1):270–288, January 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/1/270>.

**Guo:2018:SPP**

- [835] Hailong Guo, Xu Yang, and Zhimin Zhang. Superconvergence of partially penalized immersed finite element methods. *IMA Journal of Numerical Analysis*, 38(4):2123–2144, October 16, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/4/2123/4108202>.

**Guo:2019:GIF**

- [836] Ruchi Guo and Tao Lin. A group of immersed finite-element spaces for elliptic interface problems. *IMA Journal of Numerical Analysis*, 39(1):482–511, January 25, 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/1/482/4742251>.

**Guo:1997:PEE**

- [837] Wen Guo and Martin Stynes. Pointwise error estimates for a streamline diffusion scheme on a Shishkin mesh for a convection-diffusion problem. *IMA Journal of Numerical Analysis*, 17(1):29–59, January 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_17/Issue\\_01/170029.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_01/170029.sgm.abs.html).

**Gustafsson:1984:PIM**

- [838] Ivar Gustafsson. A preconditioned iterative method for the solution of the biharmonic problem. *IMA Journal of Numerical Analysis*, 4(1):55–67, January 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Gutierrez:2000:NMU**

- [839] J. M. Gutierrez and M. A. Hernandez. Newton's method under weak Kantorovich conditions. *IMA Journal of Numerical Analysis*, 20(4):521–532, October 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_04/200521abs.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_04/200521abs.pdf); [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_04/pdf/200521.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_04/pdf/200521.pdf).

**Gutknecht:2011:HWA**

- [840] Martin H. Gutknecht and Beresford N. Parlett. From  $qd$  to  $LR$ , or, how were the  $qd$  and  $LR$  algorithms discovered? *IMA Journal of Numerical Analysis*, 31(3):741–754, July 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/3/741.full.pdf+html>.

**Guttel:2018:RDC**

- [841] Stefan Güttel and John W. Pearson. A rational deferred correction approach to parabolic optimal control problems. *IMA Journal of Numerical Analysis*, 38(4):1861–1892, October 16, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/4/1861/4372128>.

**Guzman:2014:CDF**

- [842] Johnny Guzmán and Michael Neilan. Conforming and divergence-free Stokes elements in three dimensions. *IMA Journal of Numerical Analysis*, 34(4):1489–1508, October 2014. CODEN IJNADH. ISSN 0272-4979 (print),

1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/4/1489>.

**Guzman:2017:CDM**

- [843] Johnny Guzmán, Chi-Wang Shu, and Filánder A. Sequeira.  $H(\text{div})$  conforming and DG methods for incompressible Euler's equations. *IMA Journal of Numerical Analysis*, 37(4):1733–1771, October 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/1733/2670304>.

**Hackbusch:2009:CHF**

- [844] W. Hackbusch. Convolution of hp-functions on locally refined grids. *IMA Journal of Numerical Analysis*, 29(4):960–985, October 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/4/960>; <http://imajna.oxfordjournals.org/cgi/reprint/29/4/960>.

**Hackbusch:2009:SCQ**

- [845] W. Hackbusch, W. Kress, and S. A. Sauter. Sparse convolution quadrature for time domain boundary integral formulations of the wave equation. *IMA Journal of Numerical Analysis*, 29(1):158–179, January 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Hager:2017:LCA**

- [846] William W. Hager, Hongyan Hou, and Anil V. Rao. Lebesgue constants arising in a class of collocation methods. *IMA Journal of Numerical Analysis*, 37(4):1884–1901, October 1, 2017.

CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/1884/2739356>.

**Hairer:1982:OSM**

- [847] E. Hairer. A one-step method of order 10 for  $y'' = f(x, y)$ . *IMA Journal of Numerical Analysis*, 2(1): 83–94, January 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Hairer:2017:BSS**

- [848] Ernst Hairer and Arieh Iserles. Banded, stable, skew-symmetric differentiation matrices of high order. *IMA Journal of Numerical Analysis*, 37(3):1087–1103, July 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/3/1087/2670025/Banded-stable-skew-symmetric-differentiation>.

**Hairer:2014:EDI**

- [849] Ernst Hairer and Christian Lubich. Energy-diminishing integration of gradient systems. *IMA Journal of Numerical Analysis*, 34(2):452–461, April 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/2/452.full.pdf+html>.

**Hairer:2013:CSS**

- [850] Ernst Hairer and Christophe J. Zbinden. On conjugate symplecticity of  $B$ -series integrators. *IMA Journal of Numerical Analysis*, 33(1):57–79, January 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642

(electronic). URL <http://imajna.oxfordjournals.org/content/33/1/57.full.pdf+html>.

**Hajian:2019:TVD**

- [851] Soheil Hajian, Michael Hintermüller, and Stefan Ulbrich. Total variation diminishing schemes in optimal control of scalar conservation laws. *IMA Journal of Numerical Analysis*, 39(1): 105–140, January 25, 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/1/105/4742250>.

**Hale:2016:FFB**

- [852] Nicholas Hale and Alex Townsend. A fast FFT-based discrete Legendre transform. *IMA Journal of Numerical Analysis*, 36(4):1670–1684, October 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/4/1670>.

**Hall:1992:AMCb**

- [853] C. A. Hall and T. A. Porsching. Approximation methods in the computer numerically controlled fabrication of optical surfaces. I. Finite-dimensional material removal profile spaces. *IMA Journal of Numerical Analysis*, 12(1): 67–84, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Hall:1992:AMCa**

- [854] C. A. Hall and T. A. Porsching. Approximation methods in the computer numerically controlled fabrication of optical surfaces. II. Mollifica-

tions. *IMA Journal of Numerical Analysis*, 12(2):259–269, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Hall:1988:ASS**

- [855] G. Hall and Desmond Higham. Analysis of stepsize selection schemes for Runge–Kutta codes. *IMA Journal of Numerical Analysis*, 8(3):305–310, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Hall:1981:SAT**

- [856] G. Hall and M. B. Suleiman. Stability of Adams-type formulae for second-order ordinary differential equations. *IMA Journal of Numerical Analysis*, 1(4):427–438, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Hammarling:1982:NSS**

- [857] S. J. Hammarling. Numerical solution of the stable, nonnegative definite Lyapunov equation. *IMA Journal of Numerical Analysis*, 2(3):303–323, July 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Han:1992:VPF**

- [858] Wei Min Han. The  $p$ -version penalty finite element method. *IMA Journal of Numerical Analysis*, 12(1):47–56, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Handscomb:1984:SRI**

- [859] D. C. Handscomb. Spline representation of incompressible flow. *IMA Journal of Numerical Analysis*, 4(4):491–502, October 1984. CODEN IJ-

NADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Hansbo:2017:SFE**

- [860] Peter Hansbo and Mats G. Larson. A stabilized finite element method for the Darcy problem on surfaces. *IMA Journal of Numerical Analysis*, 37(3):1274–1299, July 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/3/1274/2670035/A-stabilized-finite-element-method-for-the-Darcy>.

**Hansen:2017:ADD**

- [861] Eskil Hansen and Erik Henningsson. Additive domain decomposition operator splittings-convergence analyses in a dissipative framework. *IMA Journal of Numerical Analysis*, 37(3):1496–1519, July 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/3/1496/2670039/Additive-domain-decomposition-operator-splittings>.

**Hansen:2010:DSQ**

- [862] Eskil Hansen and Alexander Ostermann. Dimension splitting for quasilinear parabolic equations. *IMA Journal of Numerical Analysis*, 30(3):857–869, July 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/3/857>; <http://imajna.oxfordjournals.org/cgi/reprint/30/3/857>.

**Hansen:2002:SCM**

- [863] Olaf Hansen. On the stability of the Collocation method for the Radiosity equation on polyhedral domains. *IMA Journal of Numerical Analysis*, 22(3):463–479, July 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_03/220463.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_03/220463.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_03/pdf/220463.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_03/pdf/220463.pdf).

**Hansen:2009:NHO**

- [864] Olaf Hansen, Kendall Atkinson, and David Chien. On the norm of the hyperinterpolation operator on the unit disc and its use for the solution of the nonlinear Poisson equation. *IMA Journal of Numerical Analysis*, 29(2):257–283, April 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/2/257>; <http://imajna.oxfordjournals.org/cgi/reprint/29/2/257>.

**Haque:1987:CSO**

- [865] S. Haque. Convergence of the successive overrelaxation method. *IMA Journal of Numerical Analysis*, 7(3):307–311, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Haut:2016:HOT**

- [866] T. S. Haut, T. Babb, P. G. Martinsen, and B. A. Wingate. A high-order time-parallel scheme for solving wave propagation problems via the direct construction of an approximate

time-evolution operator. *IMA Journal of Numerical Analysis*, 36(2):688–716, April 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/2/688>.

**He:2015:SMS**

- [867] Bingsheng He, Min Tao, and Xiaoming Yuan. A splitting method for separable convex programming. *IMA Journal of Numerical Analysis*, 35(1):394–426, January 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/1/394>.

**He:1997:ACN**

- [868] Chunyang He and G. A. Watson. An algorithm for computing the numerical radius. *IMA Journal of Numerical Analysis*, 17(3):329–342, July 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_17/Issue\\_03/170329.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_03/170329.sgm.abs.html).

**He:2003:FDS**

- [869] Journal Yinnian He. A fully discrete stabilized finite-element method for the time-dependent Navier–Stokes problem. *IMA Journal of Numerical Analysis*, 23(4):665–691, October 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_04/230665.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_04/230665.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_04/pdf/230665.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_04/pdf/230665.pdf).

**He:2015:UCE**

- [870] Yinnian He. Unconditional convergence of the Euler semi-implicit scheme for the three-dimensional incompressible MHD equations. *IMA Journal of Numerical Analysis*, 35(2):767–801, April 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/2/767>.

**Heeren:2019:VTD**

- [871] Behrend Heeren, Martin Rumpf, and Benedikt Wirth. Variational time discretization of Riemannian splines. *IMA Journal of Numerical Analysis*, 39(1):61–104, January 25, 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/1/61/4808587>.

**Hegland:1998:WAP**

- [872] Markus Hegland and Michael R. Osborne. Wrap-around partitioning for block bidiagonal linear systems. *IMA Journal of Numerical Analysis*, 18(3):373–383, July 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_03/180373.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_03/180373.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_03/pdf/180373.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_03/pdf/180373.pdf).

**Heine:2006:CFS**

- [873] Claus-Justus Heine. Computations of form and stability of rotating drops with finite elements. *IMA Journal of Numerical Analysis*, 26(4):723–751, October 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642

(electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/26/4/723>; <http://imajna.oxfordjournals.org/cgi/reprint/26/4/723>.

**Heinrich:2003:NMF**

- [874] B. Heinrich and S. Nicaise. The Nitsche mortar finite-element method for transmission problems with singularities. *IMA Journal of Numerical Analysis*, 23(2):331–358, April 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_02/230331.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_02/230331.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_02/pdf/230331.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_02/pdf/230331.pdf).

**Heinrich:2006:FFE**

- [875] Bernd Heinrich and Beate Jung. The Fourier-finite-element method with Nitsche mortaring. *IMA Journal of Numerical Analysis*, 26(3):541–562, July 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://comjnl.oxfordjournals.org/cgi/content/abstract/26/3/541>; <http://comjnl.oxfordjournals.org/cgi/reprint/26/3/541>.

**Hell:2015:MDS**

- [876] Tobias Hell, Alexander Ostermann, and Michael Sandbichler. Modification of dimension-splitting methods-overcoming the order reduction due to corner singularities. *IMA Journal of Numerical Analysis*, 35(3):1078–1091, July 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/3/1078>.

**Hemker:2000:USH**

- [877] P. W. Hemker, G. I. Shishkin, and L. P. Shishkina.  $\epsilon$ -uniform schemes with high-order time-accuracy for parabolic singular perturbation problems. *IMA Journal of Numerical Analysis*, 20(1):99–121, January 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_01/200099.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_01/200099.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_01/pdf/200099.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_01/pdf/200099.pdf).

**Henke:2014:BCS**

- [878] Christian Henke and Lutz Angermann.  $L^\infty(L^\infty)$ -boundedness and convergence of DG( $p$ ) solutions for nonlinear conservation laws with boundary conditions. *IMA Journal of Numerical Analysis*, 34(4):1598–1624, October 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/4/1598>. See erratum [879].

**Henke:2015:EP**

- [879] Christian Henke and Lutz Angermann. Erratum to the paper “ $L^\infty(L^\infty)$ -boundedness and convergence of DG( $p$ )-solutions for nonlinear conservation laws with boundary conditions”. *IMA Journal of Numerical Analysis*, 35(3):1483–1485, July 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/3/1483>. See [878].

**Herbin:2001:FVA**

- [880] Raphaële Herbin and Emmanuelle Marchand. Finite volume approximation of a class of variational inequalities. *IMA Journal of Numerical Analysis*, 21(2):553–585, April 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_02/210553.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_02/210553.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_02/pdf/210553.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_02/pdf/210553.pdf).

**Herbst:1981:CEE**

- [881] B. M. Herbst and J. F. Botha. Computable error estimates for the collocation method applied to two-point boundary value problems. *IMA Journal of Numerical Analysis*, 1(4):489–497, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Hernandez:2009:AVM**

- [882] Erwin Hernández, Enrique Otárola, Rodolfo Rodríguez, and Frank Sanhueza. Approximation of the vibration modes of a Timoshenko curved rod of arbitrary geometry. *IMA Journal of Numerical Analysis*, 29(1):180–207, January 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Herr:2017:TTI**

- [883] Sebastian Herr and Katharina Schratz. Trigonometric time integrators for the Zakharov system. *IMA Journal of Numerical Analysis*, 37(4):2042–2066, October 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-



3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/2042/2670310>.

**Heuer:2001:ASM**

- [884] Norbert Heuer and Ernst P. Stephan. An additive Schwarz method for the h-p version of the boundary integral method for hypersingular integral equations in  $\mathbb{R}$ . *IMA Journal of Numerical Analysis*, 21(1):265–283, January 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/210265abs.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210265abs.pdf); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/pdf/210265.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210265.pdf).

**Hewett:2015:FIB**

- [885] D. P. Hewett, S. Langdon, and S. N. Chandler-Wilde. A frequency-independent boundary element method for scattering by two-dimensional screens and apertures. *IMA Journal of Numerical Analysis*, 35(4):1698–1728, October 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/4/1698>.

**Higham:1989:AEK**

- [886] Desmond J. Higham. Analysis of the Enright–Kamel partitioning method for stiff ordinary differential equations. *IMA Journal of Numerical Analysis*, 9(1):1–14, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Higham:1991:GEV**

- [887] Desmond J. Higham. Global error versus tolerance for explicit Runge–

Kutta methods. *IMA Journal of Numerical Analysis*, 11(4):457–480, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Higham:2005:SRR**

- [888] Desmond J. Higham. Spectral reordering of a range-dependent weighted random graph. *IMA Journal of Numerical Analysis*, 25(3):443–457, July 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/25/3/443>; <http://imanum.oxfordjournals.org/cgi/reprint/25/3/443>.

**Higham:1988:FSV**

- [889] Nicholas J. Higham. Fast solution of Vandermonde-like systems involving orthogonal polynomials. *IMA Journal of Numerical Analysis*, 8(4):473–486, October 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Higham:1997:IRL**

- [890] Nicholas J. Higham. Iterative refinement for linear systems and LAPACK. *IMA Journal of Numerical Analysis*, 17(4):495–509, October 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_17/Issue\\_04/170495.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_04/170495.sgm.abs.html). Preprint published as Numerical Analysis Report 277, Manchester Centre for Computational Mathematics, Manchester, England, and as LAPACK Working Note 104.

**Higham:2002:CNC**

- [891] Nicholas J. Higham. Computing the nearest correlation matrix—a problem from finance. *IMA Journal of Numerical Analysis*, 22(3):329–343, July 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_03/220329.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_03/220329.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_03/pdf/220329.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_03/pdf/220329.pdf).

**Higham:2004:NSB**

- [892] Nicholas J. Higham. The numerical stability of barycentric Lagrange interpolation. *IMA Journal of Numerical Analysis*, 24(4):547–556, October 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/24/4/547>; <http://imanum.oupjournals.org/cgi/reprint/24/4/547>.

**Higham:2000:NAQ**

- [893] Nicholas J. Higham and Hyun-Min Kim. Numerical analysis of a quadratic matrix equation. *IMA Journal of Numerical Analysis*, 20(4):499–519, October 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_04/200499abs.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_04/200499abs.pdf); [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_04/pdf/200499.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_04/pdf/200499.pdf).

**Hill:1996:SCD**

- [894] A. T. Hill and E. Süli. Set convergence for discretizations of the attractor. *IMA Journal of Numerical Analysis*, 16

(2):289–296, April 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_16/Issue\\_02/160289.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_02/160289.sgm.abs.html).

**Hill:2005:MAL**

- [895] Adrian T. Hill. Multistep approximation of linear sectorial evolution equations. *IMA Journal of Numerical Analysis*, 25(1):45–56, January 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/25/1/45>; <http://imanum.oupjournals.org/cgi/reprint/25/1/45>.

**Hill:2011:EST**

- [896] Adrian T. Hill and Achim Ilchmann. Exponential stability of time-varying linear systems. *IMA Journal of Numerical Analysis*, 31(3):865–885, July 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/3/865.full.pdf+html>.

**Hill:2000:AGA**

- [897] Adrian T. Hill and Endre Süli. Approximation of the global attractor for the incompressible Navier–Stokes equations. *IMA Journal of Numerical Analysis*, 20(4):633–667, October 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_04/200633abs.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_04/200633abs.pdf); [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_04/pdf/200633.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_04/pdf/200633.pdf).

**Hill:1986:NDF**

- [898] M. G. Hill and D. Porter. The numerical determination of fundamental solutions of elliptic equations. *IMA Journal of Numerical Analysis*, 6(4):405–420, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Hirn:2012:FEA**

- [899] Adrian Hirn, Martin Lanzendörfer, and Jan Stebel. Finite element approximation of flow of fluids with shear-rate- and pressure-dependent viscosity. *IMA Journal of Numerical Analysis*, 32(4):1604–1634, October 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/4/1604.full.pdf+html>.

**Hochmuth:2001:LBE**

- [900] Reinhard Hochmuth. A localized boundary element method for the floating body problem. *IMA Journal of Numerical Analysis*, 21(4):799–816, October 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_04/210799.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_04/210799.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_04/pdf/210799.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_04/pdf/210799.pdf).

**Hocking:2012:CFM**

- [901] L. Robert Hocking and Chen Greif. Closed-form multigrid smoothing factors for lexicographic Gauss-Seidel. *IMA Journal of Numerical Analysis*, 32(3):795–812, July 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (elec-

tronic). URL <http://imajna.oxfordjournals.org/content/32/3/795.full.pdf+html>.

**Hoffmann:1996:PSV**

- [902] K.-H. Hoffmann and Jun Zou. Parallel solution of variational inequality problems with nonlinear source terms. *IMA Journal of Numerical Analysis*, 16(1):31–45, January 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_16/Issue\\_01/160031.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_01/160031.sgm.abs.html).

**Holden:2009:CFD**

- [903] H. Holden, K. H. Karlsen, and N. H. Risebro. A convergent finite-difference method for a nonlinear variational wave equation. *IMA Journal of Numerical Analysis*, 29(3):539–572, July 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/3/539>; <http://imajna.oxfordjournals.org/cgi/reprint/29/3/539>.

**Holden:2015:CFD**

- [904] Helge Holden, Ujjwal Koley, and Nils Henrik Risebro. Convergence of a fully discrete finite difference scheme for the Korteweg–de Vries equation. *IMA Journal of Numerical Analysis*, 35(3):1047–1077, July 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/3/1047>.

**Hopkins:1989:NEC**

- [905] H. H. Hopkins. Numerical evaluation of a class of double integrals of oscillatory functions. *IMA Journal of Numerical Analysis*, 9(1):61–80, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Hoppe:1993:GCM**

- [906] Ronald H. W. Hoppe. A globally convergent multi-grid algorithm for moving boundary problems of two-phase Stefan type. *IMA Journal of Numerical Analysis*, 13(2):235–253, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Hosea:1993:GEI**

- [907] M. E. Hosea and L. F. Shampine. Global extrapolation integrators for solving Sturm–Liouville problems by shooting. *IMA Journal of Numerical Analysis*, 13(3):397–411, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Houbak:1985:DRT**

- [908] Niels Houbak, Syvert P. Nørsett, and Per Grove Thomsen. Displacement or residual test in the application of implicit methods for stiff problems. *IMA Journal of Numerical Analysis*, 5(3):297–305, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Hough:1981:EFC**

- [909] D. M. Hough. Exact formulae for certain integrals arising in potential theory. *IMA Journal of Numerical Analysis*, 1(2):223–228, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Houston:2007:PEI**

- [910] Paul Houston, Ilaria Perugia, and Dominik Schötzau. An a posteriori error indicator for discontinuous Galerkin discretizations of  $H$  (curl)-elliptic partial differential equations. *IMA Journal of Numerical Analysis*, 27(1):122–150, January 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/1/122>; <http://imajna.oxfordjournals.org/cgi/reprint/27/1/122>.

**Houston:2005:DTG**

- [911] Paul Houston, Janice Robson, and Endre Süli. Discontinuous Galerkin finite element approximation of quasi-linear elliptic boundary value problems. I: the scalar case. *IMA Journal of Numerical Analysis*, 25(4):726–749, October 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/reprint/25/4/726>.

**Houston:2008:PEA**

- [912] Paul Houston, Endre Süli, and Thomas P. Wihler. A posteriori error analysis of hp-version discontinuous Galerkin finite-element methods for second-order quasi-linear elliptic PDEs. *IMA Journal of Numerical Analysis*, 28(2):245–273, April 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/2/245>; <http://imajna.oxfordjournals.org/cgi/reprint/28/2/245>.

**Houston:2012:SOE**

- [913] Paul Houston and Thomas P. Wihler. Second-order elliptic PDEs with discontinuous boundary data. *IMA Journal of Numerical Analysis*, 32(1):48–74, January 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/1/48.full.pdf+html>.

**Hovhannisyan:2010:SFA**

- [914] Nune Hovhannisyan and Siegfried Müller. On the stability of fully adaptive multiscale schemes for conservation laws using approximate flux and source reconstruction strategies. *IMA Journal of Numerical Analysis*, 30(4):1256–1295, October 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/30/4/1256.full.pdf+html>.

**Hsiao:2017:BCB**

- [915] George C. Hsiao, Tonatiuh Sánchez-Vizuet, and Francisco-Javier Sayas. Boundary and coupled boundary-finite element methods for transient wave-structure interaction. *IMA Journal of Numerical Analysis*, 37(1):237–265, January 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/1/237/2669945/Boundary-and-coupled-boundary-finite-element>.

**Hsiao:2019:TDW**

- [916] George C Hsiao, Tonatiuh Sánchez-Vizuet, Francisco-Javier Sayas, and Richard J Weinacht. A time-dependent

wave-thermoelastic solid interaction. *IMA Journal of Numerical Analysis*, 39(2):924–956, April 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/2/924/4964961>.

**Hu:1999:SRK**

- [917] Guang-Da Hu, Guang-Di Hu, and S. A. Meguid. Stability of Runge–Kutta methods for delay differential systems with multiple delays. *IMA Journal of Numerical Analysis*, 19(3):349–356, July 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_03/190349.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_03/190349.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_03/pdf/190349.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_03/pdf/190349.pdf).

**Hu:1998:GMT**

- [918] Qiya Hu. Geometric meshes and their application to Volterra integro-differential equations with singularities. *IMA Journal of Numerical Analysis*, 18(1):151–164, January 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_01/180151.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_01/180151.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_01/pdf/180151.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_01/pdf/180151.pdf).

**Hu:2004:PPS**

- [919] Qiya Hu. Preconditioning Poincaré–Steklov operators arising from domain decompositions with mortar multipliers. *IMA Journal of Numerical Analysis*, 24(4):643–669, October 2004. CODEN IJNADH. ISSN 0272-

4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/24/4/643>; <http://imanum.oupjournals.org/cgi/reprint/24/4/643>.

**Hu:1993:ADR**

- [920] Yingkang Hu. An algorithm for data reduction using splines with free knots. *IMA Journal of Numerical Analysis*, 13(3):365–381, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Huang:1981:CAO**

- [921] C. P. Huang. On the convergence of the  $QR$  algorithm with origin shifts for normal matrices. *IMA Journal of Numerical Analysis*, 1(1):127–133, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Huang:2010:CFF**

- [922] C.-S. Huang, C.-H. Hung, and Song Wang. On convergence of a fitted finite-volume method for the valuation of options on assets with stochastic volatilities. *IMA Journal of Numerical Analysis*, 30(4):1101–1120, October 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/30/4/1101.full.pdf+html>.

**Huang:2017:SGM**

- [923] Can Huang and Martin Stynes. Spectral Galerkin methods for a weakly singular Volterra integral equation of the second kind. *IMA Journal of Numerical Analysis*, 37(3):1411–1436, July 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-

3642 (electronic). URL <https://academic.oup.com/imajna/article/37/3/1411/2670015/Spectral-Galerkin-methods-for-a-weakly-singular>.

**Huang:2000:DRK**

- [924] Chengming Huang. Dissipativity of Runge–Kutta methods for dynamical systems with delays. *IMA Journal of Numerical Analysis*, 20(1):153–166, January 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_01/200153.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_01/200153.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_01/pdf/200153.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_01/pdf/200153.pdf).

**Huang:2009:SAG**

- [925] Chengming Huang. Stability analysis of general linear methods for the nonautonomous pantograph equation. *IMA Journal of Numerical Analysis*, 29(2):444–465, April 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/2/444>; <http://imajna.oxfordjournals.org/cgi/reprint/29/2/444>.

**Huang:1999:CAI**

- [926] Huaxiong Huang and Zhilin Li. Convergence analysis of the immersed interface method. *IMA Journal of Numerical Analysis*, 19(4):583–608, October 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_04/190583.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_04/190583.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_04/190583.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_04/190583.pdf).

[//www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_04/pdf/190583.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_04/pdf/190583.pdf).

**Huang:2002:MEM**

- [927] Jianguo Huang and Jun Zou. A mortar element method for elliptic problems with discontinuous coefficients. *IMA Journal of Numerical Analysis*, 22(4):549–576, October 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_04/220549.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_04/220549.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_04/pdf/220549.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_04/pdf/220549.pdf).

**Huang:1993:NPM**

- [928] Weizhang Huang and David M. Sloan. A new pseudospectral method with upwind features. *IMA Journal of Numerical Analysis*, 13(3):413–430, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Huang:2012:APM**

- [929] Y. Huang and P. A. Forsyth. Analysis of a penalty method for pricing a guaranteed minimum withdrawal benefit (GMWB). *IMA Journal of Numerical Analysis*, 32(1):320–351, January 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/1/320.full.pdf+html>.

**Huang:2005:GLL**

- [930] Zheng-Hai Huang. The global linear and local quadratic convergence of a non-interior continuation algorithm for the LCP. *IMA Journal of Numerical Analysis*, 25(4):670–684, October 2005. CODEN IJNADH.

ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/reprint/25/4/670>.

**Huhtanen:2010:RAU**

- [931] Marko Huhtanen. Rational approximation of the unitary exponential. *IMA Journal of Numerical Analysis*, 30(2):512–524, April 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/2/512>; <http://imajna.oxfordjournals.org/cgi/reprint/30/2/512>.

**Humphries:1993:SSN**

- [932] A. R. Humphries. Spurious solutions of numerical methods for initial value problems. *IMA Journal of Numerical Analysis*, 13(2):263–290, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Hundsdoerfer:1994:EGL**

- [933] Willem Hundsdoerfer. On the error of general linear methods for stiff dissipative differential equations. *IMA Journal of Numerical Analysis*, 14(3):363–379, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Hundsdoerfer:2004:NFL**

- [934] Willem Hundsdoerfer and Carolynne Montijn. A note on flux limiting for diffusion discretizations. *IMA Journal of Numerical Analysis*, 24(4):635–642, October 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

URL <http://imanum.oupjournals.org/cgi/content/abstract/24/4/635>;  
<http://imanum.oupjournals.org/cgi/reprint/24/4/635>.

**Huybrechs:2011:HORa**

- [935] Daan Huybrechs, Arieh Iserles, and Syvert P. Nørsett. From high oscillation to rapid approximation IV: accelerating convergence. *IMA Journal of Numerical Analysis*, 31(2):442–468, April 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/2/442.full.pdf+html>.

**Huybrechs:2011:HORb**

- [936] Daan Huybrechs, Arieh Iserles, and Syvert P. Nørsett. From high oscillation to rapid approximation V: the equilateral triangle. *IMA Journal of Numerical Analysis*, 31(3):755–785, July 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/3/755.full.pdf+html>.

**Huybrechs:2018:CIA**

- [937] Daan Huybrechs and Peter Opsomer. Construction and implementation of asymptotic expansions for Laguerre-type orthogonal polynomials. *IMA Journal of Numerical Analysis*, 38(3):1085–1118, July 17, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/3/1085/4056070>.

**Hyvonen:1998:PAP**

- [938] Saara Hyvönen. Polynomial acceleration of the Picard–Lindelöf iteration. *IMA Journal of Numerical Analysis*, 18(4):519–543, October 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_04/180519.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_04/180519.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_04/pdf/180519.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_04/pdf/180519.pdf).

**Iannazzo:2018:RBB**

- [939] Bruno Iannazzo and Margherita Porcelli. The Riemannian Barzilai–Borwein method with nonmonotone line search and the matrix geometric mean computation. *IMA Journal of Numerical Analysis*, 38(1):495–517, January 25, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/1/495/3573895>.

**Igbida:2018:ALM**

- [940] Nouredine Igbida and Van Thanh Nguyen. Augmented Lagrangian method for optimal partial transportation. *IMA Journal of Numerical Analysis*, 38(1):156–183, January 25, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/1/156/3061343>.

**Ilic:2010:RLA**

- [941] M. Ilić, I. W. Turner, and D. P. Simpson. A restarted Lanczos approximation to functions of a symmetric matrix. *IMA Journal of Numerical Analysis*, 30(4):1044–1061,



October 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/30/4/1044.full.pdf+html>.

**Iliev:2002:SOA**

- [942] Oleg P. Iliev. On second-order-accurate discretization of 3D interface problems and its fast solution with a pointwise multigrid solver. *IMA Journal of Numerical Analysis*, 22(3):391–406, July 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_03/220391.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_03/220391.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_03/pdf/220391.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_03/pdf/220391.pdf).

**Imbert-Gerard:2014:GPW**

- [943] Lise-Marie Imbert-Gérard and Bruno Després. A generalized plane-wave numerical method for smooth non-constant coefficients. *IMA Journal of Numerical Analysis*, 34(3):1072–1103, July 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/3/1072>.

**intHout:1997:SAR**

- [944] K. J. in 't Hout. Stability analysis of Runge–Kutta methods for systems of delay differential equations. *IMA Journal of Numerical Analysis*, 17(1):17–27, January 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_17/Issue\\_01/170017.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_01/170017.sgm.abs.html).

**intHout:2014:SCA**

- [945] K. J. in 't Hout and K. Volders. Stability and convergence analysis of discretizations of the Black–Scholes PDE with the linear boundary condition. *IMA Journal of Numerical Analysis*, 34(1):296–325, January 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/1/296.full.pdf+html>.

**Ingham:1981:BIE**

- [946] D. B. Ingham, P. J. Heggs, and M. Manzoor. Boundary integral equation solution of nonlinear plane potential problems. *IMA Journal of Numerical Analysis*, 1(4):415–426, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Iserles:1986:GLM**

- [947] A. Iserles. Generalized leapfrog methods. *IMA Journal of Numerical Analysis*, 6(4):381–392, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Iserles:1986:MDL**

- [948] A. Iserles. Multistep discretization of linear hyperbolic equations. *IMA Journal of Numerical Analysis*, 6(3):293–307, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Iserles:1990:SDN**

- [949] A. Iserles. Stability and dynamics of numerical methods for nonlinear ordinary differential equations. *IMA Journal of Numerical Analysis*, 10(1):

1–30, January 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Iserles:1991:CDC**

- [950] A. Iserles. Complex dynamics of convergence acceleration. *IMA Journal of Numerical Analysis*, 11(2):205–240, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Iserles:1990:TPR**

- [951] A. Iserles and S. P. Nørsett. On the theory of parallel Runge–Kutta methods. *IMA Journal of Numerical Analysis*, 10(4):463–488, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Iserles:1981:ARA**

- [952] A. Iserles and M. J. D. Powell. On the  $A$ -acceptability of rational approximations that interpolate the exponential function. *IMA Journal of Numerical Analysis*, 1(3):241–251, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Iserles:1992:ZHD**

- [953] A. Iserles, E. B. Saff, and Xiao Yan Liu. On zeros of Hankel determinants with iterated polynomial entries. *IMA Journal of Numerical Analysis*, 12(3):387–403, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). IMA Conference on Dynamics of Numerics and Numerics of Dynamics (Bristol, 1990).

**Iserles:1992:UAS**

- [954] A. Iserles and A. M. Stuart. Unified approach to spurious solutions introduced by time discretization. II. BDF-

like methods. *IMA Journal of Numerical Analysis*, 12(4):487–502, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Iserles:1984:SAS**

- [955] A. Iserles and R. A. Williamson. Stability and accuracy of semidiscretized finite difference methods. *IMA Journal of Numerical Analysis*, 4(3):289–307, July 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Iserles:1982:OSS**

- [956] Arieh Iserles. Order stars and a saturation theorem for first-order hyperbolics. *IMA Journal of Numerical Analysis*, 2(1):49–61, January 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Iserles:2001:MMM**

- [957] Arieh Iserles. Multistep methods on manifolds. *IMA Journal of Numerical Analysis*, 21(1):407–419, January 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/210407.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210407.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/pdf/210407.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210407.pdf).

**Iserles:2004:NQH**

- [958] Arieh Iserles. On the numerical quadrature of highly-oscillating integrals. I: Fourier transforms. *IMA Journal of Numerical Analysis*, 24(3):365–391, July 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_24/](http://www3.oup.co.uk/imanum/hdb/Volume_24/)

Issue\_03/240365.sgm.abs.html; [http://www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_03/pdf/240365.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_03/pdf/240365.pdf).

**Iserles:2005:NQH**

- [959] Arieh Iserles. On the numerical quadrature of highly-oscillating integrals II: Irregular oscillators. *IMA Journal of Numerical Analysis*, 25(1):25–44, January 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/25/1/25>; <http://imanum.oupjournals.org/cgi/reprint/25/1/25>.

**Iserles:2014:SSD**

- [960] Arieh Iserles. On skew-symmetric differentiation matrices. *IMA Journal of Numerical Analysis*, 34(2):435–451, April 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/2/435.full.pdf+html>.

**Iserles:2008:HOR**

- [961] Arieh Iserles and Syvert P. Nørsett. From high oscillation to rapid approximation I: Modified Fourier expansions. *IMA Journal of Numerical Analysis*, 28(4):862–887, October 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/4/862>.

**Iserles:2009:HOR**

- [962] Arieh Iserles and Syvert P. Nørsett. From high oscillation to rapid approximation III: multivariate expansions. *IMA Journal of Numerical Analysis*, 29(4):882–916, Oc-

tober 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/4/882>; <http://imajna.oxfordjournals.org/cgi/reprint/29/4/882>.

**Iserles:2008:D**

- [963] Arieh Iserles and Michael L. Overton. Dedication. *IMA Journal of Numerical Analysis*, 28(4):647–648, October 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/reprint/28/4/647>.

**Iserles:2007:CE**

- [964] Arieh Iserles, Michael L. Overton, and Endre Süli. Change of Editorship. *IMA Journal of Numerical Analysis*, 27(1):i, January 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/reprint/27/1/i>.

**Jackiewicz:1987:SAM**

- [965] Z. Jackiewicz. Stability analysis of modified multilag methods for Volterra integral equations. *IMA Journal of Numerical Analysis*, 7(4):473–484, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Jackson:1989:OCS**

- [966] I. R. H. Jackson. An order of convergence for some radial basis functions. *IMA Journal of Numerical Analysis*, 9(4):567–587, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Jacobs:1986:GCG**

- [967] D. A. H. Jacobs. A generalization of the conjugate-gradient method to solve complex systems. *IMA Journal of Numerical Analysis*, 6(4):447–452, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Jain:1984:SOS**

- [968] R. K. Jain, N. S. Kambo, and Rakesh Goel. A sixth-order  $P$ -stable symmetric multistep method for periodic initial value problems of second-order differential equations. *IMA Journal of Numerical Analysis*, 4(1):117–125, January 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Janovsky:1995:NAS**

- [969] Vladimír Janovský and Petr Plecháč. Numerical analysis of subspace-breaking Takens–Bogdanov points. *IMA Journal of Numerical Analysis*, 15(2):265–290, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Janovsky:1995:CAT**

- [970] Vladimír Janovský and Bodo Werner. Constructive analysis of Takens–Bogdanov points with  $Z_2$ -symmetry. *IMA Journal of Numerical Analysis*, 15(1):1–21, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Jantsch:2019:LCW**

- [971] Peter Jantsch, Clayton G Webster, and Guannan Zhang. On the Lebesgue constant of weighted Leja points for Lagrange interpolation on unbounded

domains. *IMA Journal of Numerical Analysis*, 39(2):1039–1057, April 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/2/1039/4944440>.

**Jbilou:1999:IMM**

- [972] K. Jbilou and H. Sadok.  $LU$  implementation of the modified minimal polynomial extrapolation method for solving linear and nonlinear systems. *IMA Journal of Numerical Analysis*, 19(4):549–561, October 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_04/190549.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_04/190549.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_04/pdf/190549.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_04/pdf/190549.pdf).

**Jeltsch:1998:ABS**

- [973] R. Jeltsch, R. A. Renaut, and J. H. Smit. An accuracy barrier for stable three-time-level difference schemes for hyperbolic equations. *IMA Journal of Numerical Analysis*, 18(3):445–484, July 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_03/180445.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_03/180445.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_03/pdf/180445.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_03/pdf/180445.pdf).

**Jennings:1982:BSV**

- [974] A. Jennings. Bounds for the singular values of a matrix. *IMA Journal of Numerical Analysis*, 2(4):459–474, October 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Jensen:2017:LHL**

- [975] Max Jensen.  $L^2(H_\gamma^1)$  finite element convergence for degenerate isotropic Hamilton–Jacobi–Bellman equations. *IMA Journal of Numerical Analysis*, 37(3):1300–1316, July 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/3/1300/2422322/L2-H-1-Finite-Element-Convergence-for-Degenerate->

**Jepson:1984:IOD**

- [976] A. Jepson and A. Spence. On implicit ordinary differential equations. *IMA Journal of Numerical Analysis*, 4(3):253–274, July 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Jerez-Hanckes:2017:EWS**

- [977] Carlos Jerez-Hanckes and Christoph Schwab. Electromagnetic wave scattering by random surfaces: uncertainty quantification via sparse tensor boundary elements. *IMA Journal of Numerical Analysis*, 37(3):1175–1210, July 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/3/1175/2670002/Electromagnetic-wave-scattering-by-random-surfaces->

**Jiang:2016:CIE**

- [978] Zixian Jiang and Armin Lechleiter. Computing interior eigenvalues of domains from far fields. *IMA Journal of Numerical Analysis*, 36(3):1452–1476, July 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/3/1452>.

[imajna.oxfordjournals.org/content/36/3/1452](http://imajna.oxfordjournals.org/content/36/3/1452).

**Jimack:1992:SLT**

- [979] P. K. Jimack. On steady and large time solutions of the semi-discrete moving finite element equations for one-dimensional diffusion problems. *IMA Journal of Numerical Analysis*, 12(4):545–564, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Jimack:1996:OEA**

- [980] P. K. Jimack. Optimal eigenvalue and asymptotic large-time approximations using the moving finite-element method. *IMA Journal of Numerical Analysis*, 16(3):381–398, July 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_16/Issue\\_03/160381.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_03/160381.sgm.abs.html).

**Jin:2015:EAS**

- [981] Bangti Jin, Raytcho Lazarov, Joseph Pasciak, and Zhi Zhou. Error analysis of semidiscrete finite element methods for inhomogeneous time-fractional diffusion. *IMA Journal of Numerical Analysis*, 35(2):561–582, April 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/2/561>.

**Jin:2016:ALS**

- [982] Bangti Jin, Raytcho Lazarov, and Zhi Zhou. An analysis of the  $L_1$  scheme for the subdiffusion equation with nonsmooth data. *IMA Jour-*

*nal of Numerical Analysis*, 36(1):197–221, January 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/1/197>.

**Jin:2018:ACN**

- [983] Bangti Jin, Buyang Li, and Zhi Zhou. An analysis of the Crank–Nicolson method for subdiffusion. *IMA Journal of Numerical Analysis*, 38(1):518–541, January 25, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/1/518/3782812>.

**Jin:2017:CAF**

- [984] Bangti Jin, Yifeng Xu, and Jun Zou. A convergent adaptive finite element method for electrical impedance tomography. *IMA Journal of Numerical Analysis*, 37(3):1520–1550, July 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/3/1520/2670046/A-convergent-adaptive-finite-element-method-for>.

**Jin:2012:IPC**

- [985] Bangti Jin, Yubo Zhao, and Jun Zou. Iterative parameter choice by discrepancy principle. *IMA Journal of Numerical Analysis*, 32(4):1714–1732, October 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/4/1714.full.pdf+html>.

**Jin:2010:NER**

- [986] Bangti Jin and Jun Zou. Numerical estimation of the Robin coefficient in a stationary diffusion equation. *IMA Journal of Numerical Analysis*, 30(3):677–701, July 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/3/677>; <http://imajna.oxfordjournals.org/cgi/reprint/30/3/677>.

**Jodar:1998:RMA**

- [987] Lucas Jódar and J. C. Cortés López. Rational matrix approximation with a priori error bounds for non-symmetric matrix Riccati equations with analytic coefficients. *IMA Journal of Numerical Analysis*, 18(4):545–561, October 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_04/180545.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_04/180545.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_04/pdf/180545.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_04/pdf/180545.pdf).

**Jodar:1995:NAR**

- [988] Lucas Jódar and Enrique Ponsoda. Non-autonomous Riccati-type matrix differential equations: existence interval, construction of continuous numerical solutions and error bounds. *IMA Journal of Numerical Analysis*, 15(1):61–74, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Joe:1987:DGM**

- [989] S. Joe. Discrete Galerkin methods for Fredholm integral equations of the

second kind. *IMA Journal of Numerical Analysis*, 7(2):149–164, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**John:2017:ECF**

- [990] Lorenz John, Petra Pustejovska, Barbara Wohlmuth, and Ulrich Rde. Energy-corrected finite element methods for the Stokes system. *IMA Journal of Numerical Analysis*, 37(2):687–729, April 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/2/687/2669941/Energy-corrected-finite-element-methods-for-the>.

**Johnny:2012:FNE**

- [991] Guzmn Johnny and Neilan Michael. A family of nonconforming elements for the Brinkman problem. *IMA Journal of Numerical Analysis*, 32(4):1484–1508, October 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/4/1484.full.pdf+html>.

**Johnson:2000:OBE**

- [992] Michael J. Johnson. Overcoming the boundary effects in surface spline interpolation. *IMA Journal of Numerical Analysis*, 20(3):405–422, July 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_03/200405.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_03/200405.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_03/pdf/200405.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_03/pdf/200405.pdf).

**Johnson:2009:SCM**

- [993] Michael J. Johnson. A symmetric collocation method with fast evaluation. *IMA Journal of Numerical Analysis*, 29(3):773–789, July 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/3/773>; <http://imajna.oxfordjournals.org/cgi/reprint/29/3/773>.

**Jolly:2005:CNS**

- [994] M. S. Jolly and R. Rosa. Computation of non-smooth local centre manifolds. *IMA Journal of Numerical Analysis*, 25(4):698–725, October 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/reprint/25/4/698>.

**Jovanovic:1987:CFDb**

- [995] Boko S. Jovanovi, Lav D. Ivanovi, and Endre E. Sli. Convergence of a finite-difference scheme for second-order hyperbolic equations with variable coefficients. *IMA Journal of Numerical Analysis*, 7(1):39–45, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Jovanovic:1987:CFDa**

- [996] Boko S. Jovanovi, Lav D. Ivanovi, and Endre E. Sli. Convergence of finite-difference schemes for elliptic equations with variable coefficients. *IMA Journal of Numerical Analysis*, 7(3):301–305, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Jovanovic:2011:NSP**

- [997] Boško S. Jovanović and Lubin G. Vulkov. Numerical solution of a parabolic transmission problem. *IMA Journal of Numerical Analysis*, 31(1):233–253, January 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/1/233.full.pdf+html>.

**Ju:2002:GST**

- [998] Ning Ju. On the global stability of a temporal discretization scheme for the Navier–Stokes equations. *IMA Journal of Numerical Analysis*, 22(4):577–597, October 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_04/220577.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_04/220577.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_04/pdf/220577.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_04/pdf/220577.pdf).

**Kacur:1999:SSN**

- [999] J. Kačur. Solution to strongly nonlinear parabolic problems by a linear approximation scheme. *IMA Journal of Numerical Analysis*, 19(1):119–145, January 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_01/190119.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_01/190119.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_01/pdf/190119.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_01/pdf/190119.pdf).

**Kacur:1997:NSC**

- [1000] J. Kačur and R. Van Keer. On the numerical solution of a class of nonlinear parabolic problems with Volterra operators by a Rothe-Galerkin fi-

nite element method. *IMA Journal of Numerical Analysis*, 17(2):239–269, April 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_17/Issue\\_02/170239.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_02/170239.sgm.abs.html).

**Kadalbajoo:2014:RNB**

- [1001] Mohan K. Kadalbajoo, Lok Pati Tripathi, and Puneet Arora. A robust nonuniform B-spline collocation method for solving the generalized Black–Scholes equation. *IMA Journal of Numerical Analysis*, 34(1):252–278, January 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/1/252.full.pdf+html>.

**Kaklis:1997:SPI**

- [1002] P. D. Kaklis and M. I. Karavelas. Shape-preserving interpolation in  $\mathbf{R}^3$ . *IMA Journal of Numerical Analysis*, 17(3):373–419, July 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_17/Issue\\_03/170373.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_03/170373.sgm.abs.html).

**Kaklis:1990:CPP**

- [1003] P. D. Kaklis and D. G. Pandelis. Convexity-preserving polynomial splines of nonuniform degree. *IMA Journal of Numerical Analysis*, 10(2):223–234, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Kaltenbacher:2015:ETI**

- [1004] Barbara Kaltenbacher, Vanja Nikolic, and Mechthild Thalhammer. Efficient



time integration methods based on operator splitting and application to the Westervelt equation. *IMA Journal of Numerical Analysis*, 35(3):1092–1124, July 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/3/1092>.

**Kaps:1989:RMU**

- [1005] Peter Kaps and Alexander Ostermann. Rosenbrock methods using few  $LU$ -decompositions. *IMA Journal of Numerical Analysis*, 9(1):15–27, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Karaa:2017:FVE**

- [1006] Samir Karaa, Kassem Mustapha, and Amiya K. Pani. Finite volume element method for two-dimensional fractional subdiffusion problems. *IMA Journal of Numerical Analysis*, 37(2):945–964, April 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/2/945/2669948/Finite-volume-element-method-for-two-dimensional>.

**Karageorghis:1989:MFS**

- [1007] A. Karageorghis and G. Fairweather. The method of fundamental solutions for the solution of nonlinear plane potential problems. *IMA Journal of Numerical Analysis*, 9(2):231–242, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Karageorghis:1991:CCS**

- [1008] Andreas Karageorghis and Timothy N. Phillips. Conforming Chebyshev spec-

tral collocation methods for the solution of laminar flow in a constricted channel. *IMA Journal of Numerical Analysis*, 11(1):33–54, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Karakashian:2017:TLA**

- [1009] Ohannes Karakashian and Craig Collins. Two-level additive Schwarz methods for discontinuous Galerkin approximations of second-order elliptic problems. *IMA Journal of Numerical Analysis*, 37(4):1800–1830, October 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/1800/2739359>.

**Karakatsani:2012:PEE**

- [1010] Fotini Karakatsani. A posteriori error estimates for the fractional-step  $\vartheta$ -scheme for linear parabolic equations. *IMA Journal of Numerical Analysis*, 32(1):141–162, January 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/1/141.full.pdf+html>.

**Karakatsani:2016:PEE**

- [1011] Fotini Karakatsani. A posteriori error estimates for fully discrete fractional-step  $\theta$ -approximations for parabolic equations. *IMA Journal of Numerical Analysis*, 36(3):1334–1361, July 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/3/1334>.

**Karakatsani:2007:PEA**

- [1012] Fotini Karakatsani and Charalambos Makridakis. A posteriori estimates for approximations of time-dependent Stokes equations. *IMA Journal of Numerical Analysis*, 27(4):741–764, October 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/4/741>; <http://imajna.oxfordjournals.org/cgi/reprint/27/4/741>.

**Karlsen:2002:UDA**

- [1013] K. H. Karlsen, N. H. Risebro, and J. D. Towers. Upwind difference approximations for degenerate parabolic convection-diffusion equations with a discontinuous coefficient. *IMA Journal of Numerical Analysis*, 22(4):623–664, October 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_04/220623.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_04/220623.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_04/pdf/220623.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_04/pdf/220623.pdf).

**Karlsen:2018:ASM**

- [1014] K. H. Karlsen and E. B. Storrøsten. Analysis of a splitting method for stochastic balance laws. *IMA Journal of Numerical Analysis*, 38(1):1–56, January 25, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/1/1/3076087>.

**Karlsen:2012:CMM**

- [1015] Kenneth H. Karlsen and Trygve K. Karper. A convergent mixed method

for the Stokes approximation of viscous compressible flow. *IMA Journal of Numerical Analysis*, 32(3):725–764, July 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/3/725.full.pdf+html>.

**Karlsen:1999:USS**

- [1016] Kenneth Hivstendahl Karlsen and Knut-Andreas Lie. An unconditionally stable splitting scheme for a class of nonlinear parabolic equations. *IMA Journal of Numerical Analysis*, 19(4):609–635, October 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_04/190609.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_04/190609.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_04/pdf/190609.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_04/pdf/190609.pdf).

**Kawohl:1998:CFE**

- [1017] Bernhard Kawohl and Christoph Schwab. Convergent finite elements for a class of nonconvex variational problems. *IMA Journal of Numerical Analysis*, 18(1):133–149, January 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_01/180133.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_01/180133.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_01/pdf/180133.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_01/pdf/180133.pdf).

**Kay:2001:RLE**

- [1018] David Kay and David Silvester. The reliability of local error estimators for convection-diffusion equations. *IMA Journal of Numerical Analysis*, 21(1):107–122, January 2001. CODEN IJ-

- NADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/210107.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210107.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/pdf/210107.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210107.pdf).
- Kelly:2018:ATS**
- [1019] Cónall Kelly and Gabriel J. Lord. Adaptive time-stepping strategies for nonlinear stochastic systems. *IMA Journal of Numerical Analysis*, 38(3):1523–1549, July 17, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/3/1523/4086057>.
- Kessler:2002:PEE**
- [1020] D. Kessler and J.-F. Scheid. A priori error estimates of a finite-element method for an isothermal phase-field model related to the solidification process of a binary alloy. *IMA Journal of Numerical Analysis*, 22(2):281–305, April 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_02/220281.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_02/220281.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_02/pdf/220281.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_02/pdf/220281.pdf).
- Ketcheson:2015:ASR**
- [1021] David Ketcheson, Lajos Lóczy, and Tihamér A. Kocsis. On the absolute stability regions corresponding to partial sums of the exponential function. *IMA Journal of Numerical Analysis*, 35(3):1426–1455, July 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/3/1426>.
- Khalifa:1982:CQC**
- A. K. A. Khalifa and J. C. Eilbeck. Collocation with quadratic and cubic splines. *IMA Journal of Numerical Analysis*, 2(1):111–121, January 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Khor:1990:FRM**
- [1023] K. E. Khor. A factorization-related method for elliptic partial differential equations with iterative improvement. *IMA Journal of Numerical Analysis*, 10(3):407–424, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- King:1986:NDF**
- [1024] J. Thomas King and Diego A. Murio. Numerical differentiation by finite-dimensional regularization. *IMA Journal of Numerical Analysis*, 6(1):65–85, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Kirsch:1990:CAC**
- [1025] A. Kirsch and P. Monk. Convergence analysis of a coupled finite element and spectral method in acoustic scattering. *IMA Journal of Numerical Analysis*, 10(3):425–447, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Kirsch:1994:ACF**
- [1026] A. Kirsch and P. Monk. An analysis of the coupling of finite-element and Nyström methods in acoustic scattering. *IMA Journal of Numerical Analysis*, 14(4):523–544, 1994. CODEN IJ-

NADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Kiwiel:1985:EPF**

- [1027] Krzysztof C. Kiwiel. An exact penalty function algorithm for nonsmooth convex constrained minimization problems. *IMA Journal of Numerical Analysis*, 5(1):111–119, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Kiwiel:1986:MSC**

- [1028] Krzysztof C. Kiwiel. A method for solving certain quadratic programming problems arising in nonsmooth optimization. *IMA Journal of Numerical Analysis*, 6(2):137–152, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Klein:2003:PEE**

- [1029] Olaf Klein and Claudio Verdi. A posteriori error estimates for a time discrete scheme for a phase-field system of Penrose-Fife type. *IMA Journal of Numerical Analysis*, 23(1):55–80, January 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_01/230055.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_01/230055.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_01/pdf/230055.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_01/pdf/230055.pdf).

**Kloeden:2009:ASV**

- [1030] P. E. Kloeden and J. Valero. Attractors of set-valued partial differential equations under discretization. *IMA Journal of Numerical Analysis*, 29(3):690–711, July 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642

(electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/3/690>; <http://imajna.oxfordjournals.org/cgi/reprint/29/3/690>.

**Kloeden:2003:UAN**

- [1031] Peter E. Kloeden and Johannes Schropp. Uniform attractors of nonautonomous index 2 differential algebraic equations under discretization. *IMA Journal of Numerical Analysis*, 23(2):221–239, April 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_02/230221.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_02/230221.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_02/pdf/230221.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_02/pdf/230221.pdf).

**Knobloch:2011:SFE**

- [1032] Petr Knobloch and Lutz Tobiska. On the stability of finite-element discretizations of convection–diffusion–reaction equations. *IMA Journal of Numerical Analysis*, 31(1):147–164, January 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/1/147.full.pdf+html>.

**Koch:2011:VST**

- [1033] Othmar Koch and Christian Lubich. Variational-splitting time integration of the multi-configuration time-dependent Hartree–Fock equations in electron dynamics. *IMA Journal of Numerical Analysis*, 31(2):379–395, April 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/2/379.full.pdf+html>.

oxfordjournals.org/content/31/2/379.full.pdf+html.

**Kohler:1993:EEG**

- [1034] Peter Köhler. Error estimates for generalized compound quadrature formulas. *IMA Journal of Numerical Analysis*, 13(3):477–491, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Kokkinos:1990:OMA**

- [1035] C. A. Kokkinos, N. Papamichael, and A. B. Sideridis. An orthonormalization method for the approximate conformal mapping of multiply-connected domains. *IMA Journal of Numerical Analysis*, 10(3):343–359, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Koley:2012:HOF**

- [1036] U. Koley, S. Mishra, N. H. Risebro, and M. Svärd. Higher-order finite difference schemes for the magnetic induction equations with resistivity. *IMA Journal of Numerical Analysis*, 32(3):1173–1193, July 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/3/1173.full.pdf+html>.

**Koley:2018:FDS**

- [1037] Ujjwal Koley, Ananta K. Majee, and Guy Vallet. A finite difference scheme for conservation laws driven by Lévy noise. *IMA Journal of Numerical Analysis*, 38(2):998–1050, April 18, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/2/998/3848985>.

**Koltracht:1990:CSL**

- [1038] I. Koltracht and P. Lancaster. Constraining strategies for linear iterative processes. *IMA Journal of Numerical Analysis*, 10(4):555–567, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Kopec:2015:WBE**

- [1039] Marie Kopec. Weak backward error analysis for overdamped Langevin processes. *IMA Journal of Numerical Analysis*, 35(2):583–614, April 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/2/583>.

**Kopteva:2007:MNP**

- [1040] Natalia Kopteva. Maximum norm a posteriori error estimates for a 1D singularly perturbed semilinear reaction–diffusion problem. *IMA Journal of Numerical Analysis*, 27(3):576–592, July 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/3/576>; <http://imajna.oxfordjournals.org/cgi/reprint/27/3/576>.

**Kopteva:2011:PEE**

- [1041] Natalia Kopteva and Simona Blanca Savescu. Pointwise error estimates for a singularly perturbed time-dependent semilinear reaction–diffusion problem. *IMA Journal of Numerical Analysis*, 31(2):616–639, April 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

(electronic). URL <http://imajna.oxfordjournals.org/content/31/2/616.full.pdf+html>.

**Koshy:1985:URP**

- [1042] Mathew Koshy and R. P. Tewarson. On the use of restricted pseudo-inverses for the unified derivation of quasi-Newton updates. *IMA Journal of Numerical Analysis*, 5(2):141–151, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Kovacs:2018:HOE**

- [1043] Balázs Kovács. High-order evolving surface finite element method for parabolic problems on evolving surfaces. *IMA Journal of Numerical Analysis*, 38(1):430–459, January 25, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/1/430/3074895>.

**Kovacs:2018:HOT**

- [1044] Balázs Kovács and Christian Andreas Power Guerra. Higher order time discretizations with ALE finite elements for parabolic problems on evolving surfaces. *IMA Journal of Numerical Analysis*, 38(1):460–494, January 25, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/1/460/3098317>.

**Kovacs:2017:NAP**

- [1045] Balázs Kovács and Christian Lubich. Numerical analysis of parabolic problems with dynamic boundary conditions. *IMA Journal of Numerical Analysis*, 37(1):1–39, January 1, 2017.

CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/1/1/2669955/Numerical-analysis-of-parabolic-problems-with>.

**Kratz:1987:NSM**

- [1046] W. Kratz and E. Stickel. Numerical solution of matrix polynomial equations by Newton’s method. *IMA Journal of Numerical Analysis*, 7(3):355–369, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Kress:2008:NTR**

- [1047] Wendy Kress and Stefan Sauter. Numerical treatment of retarded boundary integral equations by sparse panel clustering. *IMA Journal of Numerical Analysis*, 28(1):162–185, January 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/1/162>; <http://imajna.oxfordjournals.org/cgi/reprint/28/1/162>.

**Kressner:2014:GEP**

- [1048] Daniel Kressner, Emre Mengi, Ivica Nakić, and Ninoslav Truhar. Generalized eigenvalue problems with specified eigenvalues. *IMA Journal of Numerical Analysis*, 34(2):480–501, April 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/2/480.full.pdf+html>.

**Kretzschmar:2016:PEA**

- [1049] Fritz Kretzschmar, Andrea Moiola, Ilaria Perugia, and Sascha M. Schnepp.

A priori error analysis of space-time Trefftz discontinuous Galerkin methods for wave problems. *IMA Journal of Numerical Analysis*, 36(4):1599–1635, October 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/4/1599>.

**Kreuzer:2012:DCA**

- [1050] Christian Kreuzer, Christian A. Möller, Alfred Schmidt, and Kunibert G. Siebert. Design and convergence analysis for an adaptive discretization of the heat equation. *IMA Journal of Numerical Analysis*, 32(4):1375–1403, October 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/4/1375.full.pdf+html>.

**Kreuzer:2016:IOC**

- [1051] Christian Kreuzer and Mira Schedensack. Instance optimal Crouzeix–Raviart adaptive finite element methods for the Poisson and Stokes problems. *IMA Journal of Numerical Analysis*, 36(2):593–617, April 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/2/593>.

**Krivko:2014:NIH**

- [1052] M. Krivko and M. V. Tretyakov. Numerical integration of the Heath–Jarrow–Morton model of interest rates. *IMA Journal of Numerical Analysis*, 34(1):147–196, January 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642

(electronic). URL <http://imajna.oxfordjournals.org/content/34/1/147.full.pdf+html>.

**Kruse:2014:OEE**

- [1053] Raphael Kruse. Optimal error estimates of Galerkin finite element methods for stochastic partial differential equations with multiplicative noise. *IMA Journal of Numerical Analysis*, 34(1):217–251, January 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/1/217.full.pdf+html>.

**Ku:2011:PEE**

- [1054] Jaeun Ku. Pointwise error estimate and asymptotic error expansion inequalities for a stabilized Galerkin method. *IMA Journal of Numerical Analysis*, 31(1):165–187, January 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/1/165.full.pdf+html>.

**Ku:2016:LPE**

- [1055] JaEun Ku. Localized pointwise error estimates for direct flux approximation. *IMA Journal of Numerical Analysis*, 36(3):1410–1431, July 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/3/1410>.

**Kucera:2014:DUE**

- [1056] Václav Kucera. On diffusion-uniform error estimates for the DG method

applied to singularly perturbed problems. *IMA Journal of Numerical Analysis*, 34(2):820–861, April 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/2/820.full.pdf+html>.

**Kucera:2019:TGE**

- [1057] Václav Kucera and Chi-Wang Shu. On the time growth of the error of the DG method for advective problems. *IMA Journal of Numerical Analysis*, 39(2):687–712, April 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/2/687/4961330>.

**Kuhn:1998:CFD**

- [1058] T. Kühn. Convergence of a fully discrete approximation for advected mean curvature flows. *IMA Journal of Numerical Analysis*, 18(4):595–634, October 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_04/180595.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_04/180595.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_04/pdf/180595.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_04/pdf/180595.pdf).

**Kulikov:2013:CGE**

- [1059] Gennady Yu. Kulikov. Cheap global error estimation in some Runge–Kutta pairs. *IMA Journal of Numerical Analysis*, 33(1):136–163, January 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/1/136.full.pdf+html>.

**Kulkarni:1997:UEI**

- [1060] Rekha P. Kulkarni. Use of extrapolation for improving the order of convergence of eigenelement approximations. *IMA Journal of Numerical Analysis*, 17(2):271–284, April 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_17/Issue\\_02/170271.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_02/170271.sgm.abs.html).

**Kumar:1987:SCT**

- [1061] Sunil Kumar. Superconvergence of a collocation-type method for Hammerstein equations. *IMA Journal of Numerical Analysis*, 7(3):313–325, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Kunert:2001:PEE**

- [1062] Gerd Kunert. *A posteriori*  $L_2$  error estimation on anisotropic tetrahedral finite element meshes. *IMA Journal of Numerical Analysis*, 21(2):503–523, April 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_02/210503abs.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_02/210503abs.pdf); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_02/pdf/210503.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_02/pdf/210503.pdf).

**Kunert:2005:PHE**

- [1063] Gerd Kunert. *A posteriori*  $H^1$  error estimation for a singularly perturbed reaction diffusion problem on anisotropic meshes. *IMA Journal of Numerical Analysis*, 25(2):408–428, April 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/25/2/408;>



<http://imanum.oupjournals.org/cgi/reprint/25/2/408>.

**Kyza:2011:ECT**

**Kunkel:1989:ECS**

- [1064] P. Kunkel. Efficient computation of singular points. *IMA Journal of Numerical Analysis*, 9(3):421–433, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Kunkel:1996:TBA**

- [1065] P. Kunkel. A tree-based analysis of a family of augmented systems for the computation of singular points. *IMA Journal of Numerical Analysis*, 16(4): 501–527, October 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_16/Issue\\_04/160501.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_04/160501.sgm.abs.html).

**Kuo:1981:CMN**

- [1066] Pên Yu Kuo and J. M. Sanz-Serna. Convergence of methods for the numerical solution of the Korteweg–de Vries equation. *IMA Journal of Numerical Analysis*, 1(2):215–221, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Kyprianou:2018:UWS**

- [1067] Andreas E. Kyprianou, Ana Osojnik, and Tony Shardlow. Unbiased ‘walk-on-spheres’ Monte Carlo methods for the fractional Laplacian. *IMA Journal of Numerical Analysis*, 38(3): 1550–1578, July 17, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/3/1550/4090986>.

- [1068] Irene Kyza, Charalambos Makridakis, and Michael Plexousakis. Error control for time-splitting spectral approximations of the semiclassical Schrödinger equation. *IMA Journal of Numerical Analysis*, 31(2):416–441, April 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/2/416.full.pdf+html>.

**Lai:2002:FSD**

- [1069] Ming-Chih Lai, Wen-Wei Lin, and Weichung Wang. A fast spectral/difference method without pole conditions for Poisson-type equations in cylindrical and spherical geometries. *IMA Journal of Numerical Analysis*, 22(4):537–548, October 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_04/220537.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_04/220537.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_04/pdf/220537.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_04/pdf/220537.pdf).

**Lakkis:2012:GRA**

- [1070] Omar Lakkis and Tristan Pryer. Gradient recovery in adaptive finite-element methods for parabolic problems. *IMA Journal of Numerical Analysis*, 32(1):246–278, January 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/1/246.full.pdf+html>.

**Lamba:2007:AEM**

- [1071] H. Lamba, J. C. Mattingly, and A. M. Stuart. An adaptive Euler–Maruyama scheme for SDEs: convergence and stability. *IMA Journal of Numerical Analysis*, 27(3):479–506, July 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/3/479>; <http://imajna.oxfordjournals.org/cgi/reprint/27/3/479>.

**Lamichhane:2009:ISS**

- [1072] Bishnu P. Lamichhane. Inf-sup stable finite-element pairs based on dual meshes and bases for nearly incompressible elasticity. *IMA Journal of Numerical Analysis*, 29(2):404–420, April 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/2/404>; <http://imajna.oxfordjournals.org/cgi/reprint/29/2/404>.

**Langdon:2001:BIM**

- [1073] S. Langdon and I. G. Graham. Boundary integral methods for singularly perturbed boundary value problems. *IMA Journal of Numerical Analysis*, 21(1):217–237, January 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/210217abs.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210217abs.pdf); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/pdf/210217.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210217.pdf).

**Lanteri:2013:CDG**

- [1074] Stéphane Lanteri and Claire Scheid.

Convergence of a discontinuous Galerkin scheme for the mixed time-domain Maxwell’s equations in dispersive media. *IMA Journal of Numerical Analysis*, 33(2):432–459, April 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/2/432.full.pdf+html>.

**Larsson:2011:FEA**

- [1075] Stig Larsson and Ali Mesforush. Finite-element approximation of the linearized Cahn–Hilliard–Cook equation. *IMA Journal of Numerical Analysis*, 31(4):1315–1333, October 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/4/1315.full.pdf+html>.

**Larsson:2010:CGM**

- [1076] Stig Larsson and Fardin Saedpanah. The continuous Galerkin method for an integro-differential equation modeling dynamic fractional order viscoelasticity. *IMA Journal of Numerical Analysis*, 30(4):964–986, October 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/30/4/964.full.pdf+html>.

**Larsson:1991:FEM**

- [1077] Stig Larsson, Vidar Thomée, and Lars B. Wahlbin. Finite-element methods for a strongly damped wave equation. *IMA Journal of Numerical Analysis*, 11(1):115–142, 1991. CODEN IJ-

NADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Latouche:1994:NIN**

- [1078] Guy Latouche. Newton's iteration for non-linear equations in Markov chains. *IMA Journal of Numerical Analysis*, 14(4):583–598, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Laurita:2012:QMC**

- [1079] Concetta Laurita. A quadrature method for Cauchy singular integral equations with index  $-1$ . *IMA Journal of Numerical Analysis*, 32(3):1071–1095, July 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/3/1071.full.pdf+html>.

**LeTallec:1986:NSV**

- [1080] Patrick Le Tallec. Numerical solution of viscoplastic flow problems by augmented Lagrangians. *IMA Journal of Numerical Analysis*, 6(2):185–219, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Leake:1989:AOS**

- [1081] D. Leake and H. Mukai. Acceleration of one-step stationary root-finding algorithms. *IMA Journal of Numerical Analysis*, 9(1):81–93, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Lechleiter:2012:SVI**

- [1082] Armin Lechleiter and Dinh Liem Nguyen. Spectral volumetric integral equation methods for acoustic medium scattering in a 3D waveguide. *IMA*

*Journal of Numerical Analysis*, 32(3):813–844, July 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/3/813.full.pdf+html>.

**Lederer:2018:PRS**

- [1083] Philip L. Lederer and Joachim Schöberl. Polynomial robust stability analysis for  $H(\text{div})$ -conforming finite elements for the Stokes equations. *IMA Journal of Numerical Analysis*, 38(4):1832–1860, October 16, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/4/1832/4096776>.

**Ledoux:2010:ENS**

- [1084] Veerle Ledoux, Marnix Van Daele, and Guido Vanden Berghe. Efficient numerical solution of the one-dimensional Schrödinger eigenvalue problem using Magnus integrators. *IMA Journal of Numerical Analysis*, 30(3):751–776, July 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/3/751>; <http://imajna.oxfordjournals.org/cgi/reprint/30/3/751>.

**Lee:2012:STP**

- [1085] Mun Bae Lee, Yeon Ju Lee, and Jungho Yoon. Sobolev-type  $L_p$ -approximation orders of radial basis function interpolation to functions in fractional Sobolev spaces. *IMA Journal of Numerical Analysis*, 32(1):279–293, January 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642

(electronic). URL <http://imajna.oxfordjournals.org/content/32/1/279.full.pdf+html>.

**Lehmann:1986:CEB**

- [1086] Reinhard Lehmann. Computable error bounds in the finite-element method. *IMA Journal of Numerical Analysis*, 6(3):265–271, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Lehrenfeld:2018:AHO**

- [1087] Christoph Lehrenfeld and Arnold Reusken. Analysis of a high-order unfitted finite element method for elliptic interface problems. *IMA Journal of Numerical Analysis*, 38(3):1351–1387, July 17, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/3/1351/4084723>.

**Leimkuhler:2016:CAE**

- [1088] Benedict Leimkuhler, Charles Matthews, and Gabriel Stoltz. The computation of averages from equilibrium and nonequilibrium Langevin molecular dynamics. *IMA Journal of Numerical Analysis*, 36(1):13–79, January 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/1/13>.

**Leok:2012:PCV**

- [1089] Melvin Leok and Tatiana Shingel. Prolongation-collocation variational integrators. *IMA Journal of Numerical Analysis*, 32(3):1194–1216, July 2012. CODEN IJNADH.

ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/3/1194.full.pdf+html>.

**Leok:2011:DHV**

- [1090] Melvin Leok and Jingjing Zhang. Discrete Hamiltonian variational integrators. *IMA Journal of Numerical Analysis*, 31(4):1497–1532, October 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/4/1497.full.pdf+html>.

**LeVeque:1988:FAS**

- [1091] Randall J. LeVeque and Lloyd N. Trefethen. Fourier analysis of the SOR iteration. *IMA Journal of Numerical Analysis*, 8(3):273–279, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Levesley:1994:CCM**

- [1092] J. Levesley, D. M. Hough, and S. N. Chandler-Wilde. A Chebyshev collocation method for solving Symm’s integral equation for conformal mapping: a partial error analysis. *IMA Journal of Numerical Analysis*, 14(1):57–79, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Levin:1986:MRS**

- [1093] David Levin. Multidimensional reconstruction by set-valued approximations. *IMA Journal of Numerical Analysis*, 6(2):173–184, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Levine:1985:SRG**

- [1094] Nick Levine. Superconvergent recovery of the gradient from piecewise linear finite element approximations. *IMA Journal of Numerical Analysis*, 5(4):407–427, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Levitin:2004:SPS**

- [1095] Michael Levitin and Eugene Sharгородsky. Spectral pollution and second-order relative spectra for self-adjoint operators. *IMA Journal of Numerical Analysis*, 24(3):393–416, July 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_03/240393.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_03/240393.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_03/pdf/240393.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_03/pdf/240393.pdf).

**Levy:2005:SSD**

- [1096] Doron Levy. A stable semi-discrete central scheme for the two-dimensional incompressible Euler equations. *IMA Journal of Numerical Analysis*, 25(3): 507–522, July 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/25/3/507>; <http://imanum.oxfordjournals.org/cgi/reprint/25/3/507>.

**Li:2010:NCR**

- [1097] Buyang Li and Weiwei Sun. Newton–Cotes rules for Hadamard finite-part integrals on an interval. *IMA Journal of Numerical Analysis*, 30(4):1235–1255, October 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642

(electronic). URL <http://imajna.oxfordjournals.org/content/30/4/1235.full.pdf+html>.

**Li:1983:FEF**

- [1098] Chin Hsien Li. A finite-element front-tracking enthalpy method for Stefan problems. *IMA Journal of Numerical Analysis*, 3(1):87–107, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Li:2006:NMR**

- [1099] Chong Li and Jinhua Wang. Newton’s method on Riemannian manifolds: Smale’s point estimate theory under the  $\gamma$ -condition. *IMA Journal of Numerical Analysis*, 26(2):228–251, April 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/26/2/228>; <http://imanum.oxfordjournals.org/cgi/reprint/26/2/228>.

**Li:2018:EAV**

- [1100] Guanglian Li, Daniel Peterseim, and Mira Schedensack. Error analysis of a variational multiscale stabilization for convection-dominated diffusion equations in two dimensions. *IMA Journal of Numerical Analysis*, 38(3): 1229–1253, July 17, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/3/1229/3871420>.

**Li:2003:LGC**

- [1101] Huiyuan Li, Hua Wu, and Heping Ma. The Legendre Galerkin-Chebyshev collocation method for

- Burgers-like equations. *IMA Journal of Numerical Analysis*, 23(1):109–124, January 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_01/230109.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_01/230109.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_01/pdf/230109.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_01/pdf/230109.pdf). **Li:2003:NSL**
- [1102] Journal Changjun Li, Zheng Li, David J. Evans, and Tie Zhang. A note on an SOR-like method for augmented systems. *IMA Journal of Numerical Analysis*, 23(4):581–592, October 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_04/230581.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_04/230581.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_04/pdf/230581.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_04/pdf/230581.pdf). **Li:2011:CDF**
- [1103] Qingna Li and Dong-Hui Li. A class of derivative-free methods for large-scale nonlinear monotone equations. *IMA Journal of Numerical Analysis*, 31(4):1625–1635, October 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/4/1625.full.pdf+html>. **Li:2011:SNA**
- [1104] Tiexiang Li, Eric King-Wah Chu, Jong Juang, and Wen-Wei Lin. Solution of a nonsymmetric algebraic Riccati equation from a one-dimensional multistate transport model. *IMA Journal of Numerical Analysis*, 31(4):1453–1467, October 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/4/1453.full.pdf+html>. **Li:2019:ENA**
- [1105] Xiaoyue Li, Xuerong Mao, and George Yin. Explicit numerical approximations for stochastic differential equations in finite and infinite horizons: truncation methods, convergence in pth moment and stability. *IMA Journal of Numerical Analysis*, 39(2):847–892, April 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/2/847/4964837>. **Li:2012:GQA**
- [1106] Xingjie Helen Li and Mitchell Luskin. A generalized quasinonlocal atomistic-to-continuum coupling method with finite-range interaction. *IMA Journal of Numerical Analysis*, 32(2):373–393, April 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/2/373.full.pdf+html>. **Li:2005:PEO**
- [1107] Zhengfeng Li, Michael R. Osborne, and Tania Prvan. Parameter estimation of ordinary differential equations. *IMA Journal of Numerical Analysis*, 25(2):264–285, April 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/25/2/264>; <http://imanum.oupjournals.org/cgi/reprint/25/2/264>.

**Liang:1999:FEM**

- [1108] Dong Liang and Bo Zhang. A finite element method for a unidimensional single-phase nonlinear free boundary problem in groundwater flow. *IMA Journal of Numerical Analysis*, 19(4):563–581, October 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_04/190563.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_04/190563.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_04/pdf/190563.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_04/pdf/190563.pdf).

**Liao:2016:ET**

- [1109] Qifeng Liao and David Silvester. Erratum to “Robust stabilized Stokes approximation methods for highly stretched grids”. *IMA Journal of Numerical Analysis*, 36(2):984, April 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/2/984>. See [1074].

**Liesen:2016:PNI**

- [1110] Jörg Liesen. Pták’s nondiscrete induction and its application to matrix iterations. *IMA Journal of Numerical Analysis*, 36(3):1242–1260, July 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/3/1242>.

**Lin:2005:SEN**

- [1111] Qun Lin, Lutz Tobiska, and Aihui Zhou. Superconvergence and extrapolation of non-conforming low order finite elements applied to the Poisson

equation. *IMA Journal of Numerical Analysis*, 25(1):160–181, January 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/25/1/160>; <http://imanum.oupjournals.org/cgi/reprint/25/1/160>.

**Lin:2008:MMN**

- [1112] Yiqin Lin, Liang Bao, and Yimin Wei. A modified Newton method for solving non-symmetric algebraic Riccati equations arising in transport theory. *IMA Journal of Numerical Analysis*, 28(2):215–224, April 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/2/215>; <http://imajna.oxfordjournals.org/cgi/reprint/28/2/215>.

**Linke:2017:OVE**

- [1113] A. Linke, C. Merdon, and W. Wollner. Optimal  $L^2$  velocity error estimate for a modified pressure-robust Crouzeix–Raviart Stokes element. *IMA Journal of Numerical Analysis*, 37(1):354–374, January 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/1/354/2669970/Optimal-L2-velocity-error-estimate-for-a-modified>.

**Linss:2000:AGF**

- [1114] Torsten Linß. Analysis of a Galerkin finite element method on a Bakhvalov-Shishkin mesh for a linear convection-diffusion problem. *IMA Journal of Numerical Analysis*, 20(4):621–632,

- October 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_04/200621abs.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_04/200621abs.pdf); [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_04/pdf/200621.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_04/pdf/200621.pdf).
- Linss:2000:NSI**
- [1115] Torsten Linß. On the numerical solution of involutive ordinary differential systems. *IMA Journal of Numerical Analysis*, 20(4):561–599, October 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_04/200561abs.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_04/200561abs.pdf); [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_04/pdf/200561.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_04/pdf/200561.pdf).
- Linss:2004:EEF**
- [1116] Torsten Linss. Error expansion for a first-order upwind difference scheme applied to a model convection-diffusion problem. *IMA Journal of Numerical Analysis*, 24(2):239–253, April 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_02/240239.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_02/240239.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_02/pdf/240239.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_02/pdf/240239.pdf).
- Linss:2009:LAM**
- [1117] Torsten Linß and Niall Madden. Layer-adapted meshes for a linear system of coupled singularly perturbed reaction-diffusion problems. *IMA Journal of Numerical Analysis*, 29(1):109–125, January 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Lipman:2010:APS**
- [1118] Yaron Lipman and David Levin. Approximating piecewise-smooth functions. *IMA Journal of Numerical Analysis*, 30(4):1159–1183, October 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/30/4/1159.full.pdf+html>.
- Liu:2009:TSS**
- [1119] Fang Liu, Niall Madden, Martin Stynes, and Aihui Zhou. A two-scale sparse grid method for a singularly perturbed reaction-diffusion problem in two dimensions. *IMA Journal of Numerical Analysis*, 29(4):986–1007, October 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/4/986>; <http://imajna.oxfordjournals.org/cgi/reprint/29/4/986>.
- Liu:2019:AMP**
- [1120] Hailiang Liu, Yunqing Huang, Wenyang Lu, and Nianyu Yi. On accuracy of the mass-preserving DG method to multi-dimensional Schrödinger equations. *IMA Journal of Numerical Analysis*, 39(2):760–791, April 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/2/760/4959865>.
- Liu:2006:MSR**
- [1121] Hongyu Liu and Kai Zhang. Multi-symplectic Runge-Kutta-type meth-



ods for Hamiltonian wave equations. *IMA Journal of Numerical Analysis*, 26(2):252–271, April 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/26/2/252>; <http://imanum.oxfordjournals.org/cgi/reprint/26/2/252>.

**Liu:2013:MPS**

- [1122] Jie Liu. A mass-preserving splitting scheme for the stochastic Schrödinger equation with multiplicative noise. *IMA Journal of Numerical Analysis*, 33(4):1469–1479, October 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/4/1469.full.pdf+html>.

**Liu:1990:SMN**

- [1123] M. Z. Liu and M. N. Spijker. The stability of the  $\theta$ -methods in the numerical solution of delay differential equations. *IMA Journal of Numerical Analysis*, 10(1):31–48, January 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Liu:2018:SES**

- [1124] Xiaowei Liu, Martin Stynes, and Jin Zhang. Supercloseness of edge stabilization on Shishkin rectangular meshes for convection–diffusion problems with exponential layers. *IMA Journal of Numerical Analysis*, 38(4):2105–2122, October 16, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/4/2105/4108203>.

**Loach:1991:BLS**

- [1125] P. D. Loach and A. J. Wathen. On the best least squares approximation of continuous functions using linear splines with free knots. *IMA Journal of Numerical Analysis*, 11(3):393–409, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Lombardi:2011:IEE**

- [1126] Ariel L. Lombardi. Interpolation error estimates for edge elements on anisotropic meshes. *IMA Journal of Numerical Analysis*, 31(4):1683–1712, October 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/4/1683.full.pdf+html>.

**Lopez:1983:SAB**

- [1127] Luciano Lopez. Stability and asymptotic behaviour for the numerical solution of a reaction–diffusion model for a deterministic diffusive epidemic. *IMA Journal of Numerical Analysis*, 3(3):341–351, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Lopez-Fernandez:2013:GCQ**

- [1128] Maria Lopez-Fernandez and Stefan Sauter. Generalized convolution quadrature with variable time stepping. *IMA Journal of Numerical Analysis*, 33(4):1156–1175, October 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/4/1156.full.pdf+html>.

**Lopez-Gomez:1992:SSM**

- [1129] J. López-Gómez, J. C. Eilbeck, M. Molina, and K. N. Duncan. Structure of solution manifolds in a strongly coupled elliptic system. *IMA Journal of Numerical Analysis*, 12(3):405–428, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). IMA Conference on Dynamics of Numerics and Numerics of Dynamics (Bristol, 1990).

**LopezMarcos:1988:SCN**

- [1130] J. C. López Marcos and J. M. Sanz-Serna. Stability and convergence in numerical analysis. III. Linear investigation of nonlinear stability. *IMA Journal of Numerical Analysis*, 8(1):71–84, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**LopezMarcos:1994:NAP**

- [1131] M. Á. López Marcos. Numerical analysis of pseudospectral methods for the Kuramoto–Sivashinsky equation. *IMA Journal of Numerical Analysis*, 14(2):233–242, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Lorcher:2007:LWT**

- [1132] Frieder Lörcher and Claus-Dieter Munz. Lax–Wendroff-type schemes of arbitrary order in several space dimensions. *IMA Journal of Numerical Analysis*, 27(3):593–615, July 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/3/593>; <http://imajna.oxfordjournals.org/cgi/reprint/27/3/593>.

[oxfordjournals.org/cgi/reprint/27/3/593](http://imajna.oxfordjournals.org/cgi/reprint/27/3/593).

**Lord:2004:NSS**

- [1133] Gabriel J. Lord and Jacques Rougemont. A numerical scheme for stochastic PDEs with Gevrey regularity. *IMA Journal of Numerical Analysis*, 24(4):587–604, October 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/24/4/587>; <http://imanum.oupjournals.org/cgi/reprint/24/4/587>.

**Lord:2013:SEI**

- [1134] Gabriel J. Lord and Antoine Tambue. Stochastic exponential integrators for the finite element discretization of SPDEs for multiplicative and additive noise. *IMA Journal of Numerical Analysis*, 33(2):515–543, April 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/2/515.full.pdf+html>.

**Lu:1993:SBM**

- [1135] Lian Hua Lu. The stability of the block  $\theta$ -methods. *IMA Journal of Numerical Analysis*, 13(1):101–114, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Lube:2002:SFE**

- [1136] Gert Lube and Maxim A. Olshanskii. Stable finite-element calculation of incompressible flows using the rotation form of convection. *IMA Journal of Numerical Analysis*, 22(3):

437–461, July 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_03/220437.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_03/220437.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_03/pdf/220437.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_03/pdf/220437.pdf).

**Lubich:1983:SLM**

- [1137] Ch. Lubich. On the stability of linear multistep methods for Volterra convolution equations. *IMA Journal of Numerical Analysis*, 3(4):439–465, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Lubich:1986:SAC**

- [1138] Ch. Lubich. A stability analysis of convolution quadratures for Abel–Volterra integral equations. *IMA Journal of Numerical Analysis*, 6(1):87–101, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Lubich:1987:FLM**

- [1139] Ch. Lubich. Fractional linear multistep methods for Abel–Volterra integral equations of the first kind. *IMA Journal of Numerical Analysis*, 7(1):97–106, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Lubich:1995:LIT**

- [1140] Ch. Lubich and A. Ostermann. Linearly implicit time discretization of non-linear parabolic equations. *IMA Journal of Numerical Analysis*, 15(4):555–583, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Lubich:2013:BDT**

- [1141] Christian Lubich, Dhia Mansour, and Chandrasekhar Venkataraman. Backward difference time discretization of parabolic differential equations on evolving surfaces. *IMA Journal of Numerical Analysis*, 33(4):1365–1385, October 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/4/1365.full.pdf+html>.

**Ludwig:2016:CSF**

- [1142] Lars Ludwig and Hans-Goerg Roos. Convergence and supercloseness of a finite element method for a singularly perturbed convection-diffusion problem on an L-shaped domain. *IMA Journal of Numerical Analysis*, 36(3):1261–1280, July 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/3/1261>.

**Ludwig:2014:FES**

- [1143] Lars Ludwig and Hans-Görg Roos. Finite element superconvergence on Shishkin meshes for convection-diffusion problems with corner singularities. *IMA Journal of Numerical Analysis*, 34(2):782–799, April 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/2/782.full.pdf+html>.

**Lui:2009:LNO**

- [1144] S. H. Lui. A Lions non-overlapping domain decomposition method for

domains with an arbitrary interface. *IMA Journal of Numerical Analysis*, 29(2):332–349, April 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/2/332>; <http://imajna.oxfordjournals.org/cgi/reprint/29/2/332>.

**Lund:1989:SSG**

- [1145] John Lund, Kenneth L. Bowers, and Kelly M. McArthur. Symmetrization of the sinc-Galerkin method with block techniques for elliptic equations. *IMA Journal of Numerical Analysis*, 9(1):29–46, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Lund:1984:SCM**

- [1146] John R. Lund and Bruce V. Riley. A sinc-collocation method for the computation of the eigenvalues of the radial Schrödinger equation. *IMA Journal of Numerical Analysis*, 4(1):83–98, January 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Lyche:1988:DRS**

- [1147] T. Lyche and K. Mørken. A data-reduction strategy for splines with applications to the approximation of functions and data. *IMA Journal of Numerical Analysis*, 8(2):185–208, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Lyness:1989:ILR**

- [1148] J. N. Lyness. An introduction to lattice rules and their generator matrices.

*IMA Journal of Numerical Analysis*, 9(3):405–419, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Ma:2018:EEC**

- [1149] Chupeng Ma, Liqun Cao, and Yanping Lin. Error estimates of Crank–Nicolson Galerkin method for the time-dependent Maxwell–Schrödinger equations under the Lorentz gauge. *IMA Journal of Numerical Analysis*, 38(4):2074–2104, October 16, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/4/2074/4321721>.

**Ma:1987:FPM**

- [1150] He Ping Ma and Ben Yu Guo. The Fourier pseudospectral method for two-dimensional vorticity equations. *IMA Journal of Numerical Analysis*, 7(1):47–60, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Ma:2006:PEE**

- [1151] Jingtang Ma and Hermann Brunner. A posteriori error estimates of discontinuous Galerkin methods for non-standard Volterra integro-differential equations. *IMA Journal of Numerical Analysis*, 26(1):78–95, January 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/26/1/78>; <http://imanum.oxfordjournals.org/cgi/reprint/26/1/78>.

**Ma:2017:UMN**

- [1152] K. Ma and P. A. Forsyth. An unconditionally monotone numerical scheme for the two-factor uncertain volatility model. *IMA Journal of Numerical Analysis*, 37(2):905–944, April 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/2/905/2669987>. An-unconditionally-monotone-numerical-scheme-for.

**Ma:2018:WEA**

- [1153] Lina Ma, Jie Shen, Li-Lian Wang, and Zhiguo Yang. Wavenumber explicit analysis for time-harmonic Maxwell equations in a spherical shell and spectral approximations. *IMA Journal of Numerical Analysis*, 38(2):810–851, April 18, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/2/810/3844800>.

**Mackenzie:2011:ASC**

- [1154] J. A. Mackenzie and A. Madzvamuse. Analysis of stability and convergence of finite-difference methods for a reaction–diffusion problem on a one-dimensional growing domain. *IMA Journal of Numerical Analysis*, 31(1):212–232, January 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/1/212.full.pdf+html>.

**Mackenzie:2007:ASC**

- [1155] J. A. Mackenzie and W. R. Mekwi. An analysis of stability and conver-

gence of a finite-difference discretization of a model parabolic PDE in 1D using a moving mesh. *IMA Journal of Numerical Analysis*, 27(3):507–528, July 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/3/507>; <http://imajna.oxfordjournals.org/cgi/reprint/27/3/507>.

**Mackenzie:2012:USS**

- [1156] J. A. Mackenzie and W. R. Mekwi. An unconditionally stable second-order accurate ale-fem scheme for two-dimensional convection-diffusion problems. *IMA Journal of Numerical Analysis*, 32(3):888–905, July 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/3/888.full.pdf+html>.

**Mackenzie:1999:UCA**

- [1157] John Mackenzie. Uniform convergence analysis of an upwind finite-difference approximation of a convection-diffusion boundary value problem on an adaptive grid. *IMA Journal of Numerical Analysis*, 19(2):233–249, April 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_02/190233.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_02/190233.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_02/pdf/190233.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_02/pdf/190233.pdf).

**Madden:2003:UCN**

- [1158] Journal Niall Madden and Martin Stynes. A uniformly convergent nu-

- merical method for a coupled system of two singularly perturbed linear reaction-diffusion problems. *IMA Journal of Numerical Analysis*, 23(4): 627–644, October 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_04/230627.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_04/230627.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_04/pdf/230627.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_04/pdf/230627.pdf).
- Maes:2006:HBP**
- [1159] Jan Maes and Adhemar Bultheel. A hierarchical basis preconditioner for the biharmonic equation on the sphere. *IMA Journal of Numerical Analysis*, 26(3):563–583, July 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://comjnl.oxfordjournals.org/cgi/content/abstract/26/3/563>; <http://comjnl.oxfordjournals.org/cgi/reprint/26/3/563>.
- Maeztu:1989:SCF**
- [1160] J. I. Maeztu. On symmetric cubature formulae for planar regions. *IMA Journal of Numerical Analysis*, 9(2):167–183, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Maire:2006:MCM**
- [1161] Sylvain Maire and Denis Talay. On a Monte Carlo method for neutron transport criticality computations. *IMA Journal of Numerical Analysis*, 26(4):657–685, October 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/26/4/657>; <http://imajna.oxfordjournals.org/cgi/reprint/26/4/657>.
- Makrelov:1985:CTM**
- [1162] I. Makrelov and Kh. Semerdzhiev. On the convergence of two methods for the simultaneous finding of all roots of exponential equations. *IMA Journal of Numerical Analysis*, 5(2):191–200, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Makridakis:1995:HOF**
- [1163] Charalambos G. Makridakis. High-order fully discrete methods for the equations of elastic wave propagation with absorbing boundary conditions. *IMA Journal of Numerical Analysis*, 15(3):377–404, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Makroglou:1982:HMN**
- [1164] A. Makroglou. Hybrid methods in the numerical solution of Volterra integro-differential equations. *IMA Journal of Numerical Analysis*, 2(1):21–35, January 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). See errata [1165].
- Makroglou:1983:EHM**
- [1165] A. Makroglou. Errata: “Hybrid methods in the numerical solution of Volterra integro-differential equations” [IMA J. Numer. Anal. 2 (1982), no. 1, 21–35; MR 83d:65352]. *IMA Journal of Numerical Analysis*, 3(3):381–382, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). See [1164].

**Malek:1995:PCM**

- [1166] Alaeddin Malek and Timothy N. Phillips. Pseudospectral collocation methods for fourth-order differential equations. *IMA Journal of Numerical Analysis*, 15(4):523–553, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Malkmus:2018:GSM**

- [1167] T. Malkmus, M. Ruzicka, S. Eckstein, and I. Touloupoulos. Generalizations of SIP methods to systems with  $p$ -structure. *IMA Journal of Numerical Analysis*, 38(3):1420–1451, July 17, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/3/1420/4108120>.

**Manneback:1985:MAG**

- [1168] P. E. Manneback, Ch. Murigande, and Ph. L. Toint. A modification of an algorithm by Golub and Plemmons for large linear least squares in the context of Doppler positioning. *IMA Journal of Numerical Analysis*, 5(2):221–233, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Manni:1997:MIO**

- [1169] Carla Manni and Paul Sablonnière. Monotone interpolation of order 3 by  $C^2$  cubic splines. *IMA Journal of Numerical Analysis*, 17(2):305–320, April 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_17/Issue\\_02/170305.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_02/170305.sgm.abs.html).

**Mannikko:1994:RMI**

- [1170] T. Männikkö, P. Neittaanmäki, and D. Tiba. A rapid method for the identification of the free boundary in two-phase Stefan problems. *IMA Journal of Numerical Analysis*, 14(3):411–420, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Manoranjan:1993:SET**

- [1171] V. S. Manoranjan and R. Drake. A spectrum enveloping technique for convection-diffusion computations. *IMA Journal of Numerical Analysis*, 13(3):431–443, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Manouzi:2001:MFE**

- [1172] H. Manouzi and M. Farhloul. Mixed finite element analysis of a non-linear three-fields Stokes model. *IMA Journal of Numerical Analysis*, 21(1):143–164, January 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/210143abs.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210143abs.pdf); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/pdf/210143.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210143.pdf).

**Manouzi:2004:MFE**

- [1173] Hassan Manouzi and Thomas Gorm Theting. Mixed finite element approximation for the stochastic pressure equation of Wick type. *IMA Journal of Numerical Analysis*, 24(4):605–634, October 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/24/4/605;>

<http://imanum.oupjournals.org/cgi/reprint/24/4/605>.

**Marazzina:2008:SPD**

- [1174] Daniele Marazzina. Stability properties of discontinuous Galerkin methods for 2D elliptic problems. *IMA Journal of Numerical Analysis*, 28(3):552–579, July 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/3/552>; <http://imajna.oxfordjournals.org/cgi/reprint/28/3/552>.

**Marin:2014:CTR**

- [1175] Oana Marin, Olof Runborg, and Anna-Karin Tornberg. Corrected trapezoidal rules for a class of singular functions. *IMA Journal of Numerical Analysis*, 34(4):1509–1540, October 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/4/1509>.

**Marinov:1986:TEI**

- [1176] Corneliu Marinov. Truncation errors for infinite linear systems. *IMA Journal of Numerical Analysis*, 6(1):51–63, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Markham:1990:CGT**

- [1177] G. Markham. Conjugate gradient type methods for indefinite, asymmetric, and complex systems. *IMA Journal of Numerical Analysis*, 10(2):155–170, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Marletta:2010:NDM**

- [1178] Marco Marletta. Neumann–Dirichlet maps and analysis of spectral pollution for non-self-adjoint elliptic PDEs with real essential spectrum. *IMA Journal of Numerical Analysis*, 30(4):917–939, October 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/30/4/917.full.pdf+html>.

**Marquez:2015:SCF**

- [1179] Antonio Márquez, Salim Meddahi, and Francisco-Javier Sayas. Strong coupling of finite element methods for the Stokes–Darcy problem. *IMA Journal of Numerical Analysis*, 35(2):969–988, April 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/2/969>.

**Marsden:1984:CSI**

- [1180] M. J. Marsden. Cubic  $X$ -spline interpolants. *IMA Journal of Numerical Analysis*, 4(2):203–207, April 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Martins:1995:EBM**

- [1181] M. Madalena Martins and M. Estela Trigo. An error bound for the modified successive overrelaxation method. *IMA Journal of Numerical Analysis*, 15(4):461–473, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Maset:2013:SPE**

- [1182] S. Maset and M. Zennaro. Stability properties of explicit exponential



Runge–Kutta methods. *IMA Journal of Numerical Analysis*, 33(1):111–135, January 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/1/111.full.pdf+html>.

**Mason:1981:NMI**

- [1183] J. C. Mason. Near-minimax interpolation by a polynomial in  $z$  and  $z^{-1}$  on a circular annulus. *IMA Journal of Numerical Analysis*, 1(3):359–367, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Mason:1983:NBA**

- [1184] J. C. Mason. Near-best  $L_p$  approximations by real and complex Chebyshev series. *IMA Journal of Numerical Analysis*, 3(4):493–504, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Mason:1984:NBA**

- [1185] J. C. Mason and B. L. Chalmers. Near-best  $L_p$  approximations by Fourier, Taylor and Laurent series. *IMA Journal of Numerical Analysis*, 4(1):1–8, January 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Mastroianni:1994:NIB**

- [1186] G. Mastroianni and G. Monegato. Nyström interpolants based on the zeros of Legendre polynomials for a noncompact integral operator equation. *IMA Journal of Numerical Analysis*, 14(1):81–95, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Mastroianni:1997:NIB**

- [1187] G. Mastroianni and G. Monegato. Nyström interpolants based on zeros of Laguerre polynomials for some Weiner-Hopf equations. *IMA Journal of Numerical Analysis*, 17(4):621–642, October 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_17/Issue\\_04/170621.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_04/170621.sgm.abs.html).

**Mastroianni:2009:SNM**

- [1188] Giuseppe Mastroianni and Gradimir V. Milovanovic. Some numerical methods for second-kind Fredholm integral equations on the real semi-axis. *IMA Journal of Numerical Analysis*, 29(4):1046–1066, October 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/4/1046>; <http://imajna.oxfordjournals.org/cgi/reprint/29/4/1046>.

**Mastroianni:2014:GQR**

- [1189] Giuseppe Mastroianni, Incoronata Notarangelo, and Gradimir V. Milovanović. Gaussian quadrature rules with an exponential weight on the real semi-axis. *IMA Journal of Numerical Analysis*, 34(4):1654–1685, October 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/4/1654>.

**Mastronardi:2015:SBS**

- [1190] Nicola Mastronardi and Paul Van Dooren. A structurally backward

stable algorithm for solving the indefinite least squares problem with equality constraints. *IMA Journal of Numerical Analysis*, 35(1):107–132, January 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/1/107>.

**Matos:1990:CAM**

- [1191] Ana C. Matos. A convergence acceleration method based on a good estimation of the absolute value of the error. *IMA Journal of Numerical Analysis*, 10(2):243–251, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Matos:2000:LDO**

- [1192] Ana C. Matos. Linear difference operators and acceleration methods. *IMA Journal of Numerical Analysis*, 20(3):359–388, July 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_03/200359.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_03/200359.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_03/pdf/200359.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_03/pdf/200359.pdf).

**Mattheij:1992:DBS**

- [1193] R. M. M. Mattheij. Decoupling of bidiagonal systems involving singular blocks. *IMA Journal of Numerical Analysis*, 12(2):301–317, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Matthies:2015:LPT**

- [1194] Gunar Matthies and Lutz Tobiska. Local projection type stabilization applied to inf-sup stable discretizations

of the Oseen problem. *IMA Journal of Numerical Analysis*, 35(1):239–269, January 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/1/239>.

**Mazya:1996:AAU**

- [1195] Vladimir Maz'ya and Gunther Schmidt. On approximate approximations using Gaussian kernels. *IMA Journal of Numerical Analysis*, 16(1):13–29, January 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_16/Issue\\_01/160013.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_01/160013.sgm.abs.html).

**McKee:1983:DMB**

- [1196] S. McKee. Discretization methods and block isoclinal matrices. *IMA Journal of Numerical Analysis*, 3(4):467–491, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**McKee:2000:ETM**

- [1197] Sean McKee, Tao Tang, and Teresa Diogo. An Euler-type method for two-dimensional Volterra integral equations of the first kind. *IMA Journal of Numerical Analysis*, 20(3):423–440, July 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_03/200423.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_03/200423.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_03/pdf/200423.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_03/pdf/200423.pdf).

**McLachlan:2003:SDP**

- [1198] Journal Robert I. McLachlan. Spatial discretization of partial differential equations with integrals. *IMA*

*Journal of Numerical Analysis*, 23(4): 645–664, October 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_04/230645.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_04/230645.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_04/pdf/230645.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_04/pdf/230645.pdf).

**McLachlan:2015:CLP**

- [1199] Robert I. McLachlan, Klas Modin, and Olivier Verdier. Collective Lie–Poisson integrators on  $R^3$ . *IMA Journal of Numerical Analysis*, 35(2):546–560, April 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/2/546>.

**McLean:1989:AEE**

- [1200] W. McLean. Asymptotic error expansions for numerical solutions of integral equations. *IMA Journal of Numerical Analysis*, 9(3):373–384, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**McLean:1994:FDS**

- [1201] W. McLean and I. H. Sloan. A fully discrete and symmetric boundary element method. *IMA Journal of Numerical Analysis*, 14(3):311–345, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**McLean:2004:TDE**

- [1202] William McLean and Vidar Thomée. Time discretization of an evolution equation via Laplace transforms. *IMA Journal of Numerical Analysis*, 24(3): 439–463, July 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-

3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_03/240439.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_03/240439.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_03/pdf/240439.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_03/pdf/240439.pdf).

**McLean:2010:MNE**

- [1203] William McLean and Vidar Thomée. Maximum-norm error analysis of a numerical solution via Laplace transformation and quadrature of a fractional-order evolution equation. *IMA Journal of Numerical Analysis*, 30(1):208–230, January 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/1/208>; <http://imajna.oxfordjournals.org/cgi/reprint/30/1/208>.

**McLeod:1982:GDD**

- [1204] R. J. Y. McLeod and J. M. Sanz-Serna. Geometrically derived difference formulae for the numerical integration of trajectory problems. *IMA Journal of Numerical Analysis*, 2(3):357–370, July 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Meddahi:1999:MDM**

- [1205] Salim Meddahi and Antonio Márquez. A multidomain discretization method with local mesh refinement. *IMA Journal of Numerical Analysis*, 19(2): 251–271, April 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_02/190251.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_02/190251.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_02/pdf/190251.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_02/pdf/190251.pdf).

**Meddahi:2015:FEA**

- [1206] Salim Meddahi, David Mora, and Rodolfo Rodríguez. A finite element analysis of a pseudostress formulation for the Stokes eigenvalue problem. *IMA Journal of Numerical Analysis*, 35(2):749–766, April 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/2/749>.

**Meek:1982:TST**

- [1207] P. C. Meek and J. Norbury. Two-stage, two-level finite difference schemes for nonlinear parabolic equations. *IMA Journal of Numerical Analysis*, 2(3):335–356, July 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Meerbergen:2016:IRR**

- [1208] Karl Meerbergen. An implicitly restarted rational Krylov strategy for Lyapunov inverse iteration. *IMA Journal of Numerical Analysis*, 36(2):655–674, April 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/2/655>.

**Meerbergen:2017:CPA**

- [1209] Karl Meerbergen, Emre Mengi, Wim Michiels, and Roel Van Beeumen. Computation of pseudospectral abscissa for large-scale nonlinear eigenvalue problems. *IMA Journal of Numerical Analysis*, 37(4):1831–1863, October 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/1831/2894467>. See erratum [1210].

[academic.oup.com/imajna/article/37/4/1831/2894467](https://academic.oup.com/imajna/article/37/4/1831/2894467). See erratum [1210].

**Meerbergen:2018:EC**

- [1210] Karl Meerbergen, Emre Mengi, Wim Michiels, and Roel Van Beeumen. Erratum to: “Computation of pseudospectral abscissa for large-scale nonlinear eigenvalue problems”. *IMA Journal of Numerical Analysis*, 38(3):1598, July 17, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/3/1598/4769650>. See [1209].

**Meerbergen:1996:MTC**

- [1211] Karl Meerbergen and Dirk Roose. Matrix transformations for computing rightmost eigenvalues of large sparse non-symmetric eigenvalue problems. *IMA Journal of Numerical Analysis*, 16(3):297–346, July 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_16/Issue\\_03/160297.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_03/160297.sgm.abs.html).

**Melenk:2014:QOP**

- [1212] J. M. Melenk, H. Rezaiejafari, and B. Wohlmuth. Quasi-optimal a priori estimates for fluxes in mixed finite element methods and an application to the Stokes–Darcy coupling. *IMA Journal of Numerical Analysis*, 34(1):1–27, January 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/1/1.full.pdf+html>.

**Melenk:2013:REC**

- [1213] J. M. Melenk, C. Xenophontos, and L. Oberbroeckling. Robust exponential convergence of  $hp$  FEM for singularly perturbed reaction-diffusion systems with multiple scales. *IMA Journal of Numerical Analysis*, 33(2):609–628, April 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/2/609.full.pdf+html>.

**Melenk:1997:REC**

- [1214] Jens Markus Melenk. On the robust exponential convergence of  $hp$  finite element methods for problems with boundary layers. *IMA Journal of Numerical Analysis*, 17(4):577–601, October 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_17/Issue\\_04/170577.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_04/170577.sgm.abs.html).

**Melenk:1999:FEM**

- [1215] Jens Markus Melenk and Christoph Schwab. An  $hp$  finite element method for convection-diffusion problems in one dimension. *IMA Journal of Numerical Analysis*, 19(3):425–453, July 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_03/190425.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_03/190425.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_03/pdf/190425.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_03/pdf/190425.pdf).

**Meng:2018:DDE**

- [1216] Xiong Meng and Jennifer K. Ryan. Divided difference estimates and accuracy enhancement of discontinuous

Galerkin methods for nonlinear symmetric systems of hyperbolic conservation laws. *IMA Journal of Numerical Analysis*, 38(1):125–155, January 25, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/1/125/3038023>.

**Meng:2012:SLD**

- [1217] Xiong Meng, Chi-Wang Shu, and Boying Wu. Superconvergence of the local discontinuous Galerkin method for linear fourth-order time-dependent problems in one space dimension. *IMA Journal of Numerical Analysis*, 32(4):1294–1328, October 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/4/1294.full.pdf+html>.

**Mengi:2005:ACP**

- [1218] Emre Mengi and Michael L. Overton. Algorithms for the computation of the pseudospectral radius and the numerical radius of a matrix. *IMA Journal of Numerical Analysis*, 25(4):648–669, October 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/reprint/25/4/648>.

**Messaoudi:1995:SPR**

- [1219] A. Messaoudi. Some properties of the recursive projection and interpolation algorithms. *IMA Journal of Numerical Analysis*, 15(3):307–318, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Micheletti:2008:UBA**

- [1220] Stefano Micheletti, Simona Perotto, and Marco Verani. Uzawa-based adaptive methods for linear output functionals. *IMA Journal of Numerical Analysis*, 28(3):619–646, July 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/3/619>; <http://imajna.oxfordjournals.org/cgi/reprint/28/3/619>.

**Micula:2015:TCN**

- [1221] Sanda Micula and Wolfgang L. Wendland. Trigonometric collocation for nonlinear Riemann–Hilbert problems on doubly connected domains. *IMA Journal of Numerical Analysis*, 35(2):834–858, April 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/2/834>.

**Miellou:2005:SCF**

- [1222] J. C. Miellou, P. Spiteri, and D. El Baz. Stopping criteria, forward and backward errors for perturbed asynchronous linear fixed point methods in finite precision. *IMA Journal of Numerical Analysis*, 25(3):429–442, July 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/25/3/429>; <http://imanum.oxfordjournals.org/cgi/reprint/25/3/429>.

**Miettinen:1995:ANM**

- [1223] Markku Miettinen and Jaroslav Haslinger. Approximation of non-monotone multivalued differential inclusions. *IMA Journal of Numerical Analysis*, 15(4):475–503, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Mihai:2006:ASB**

- [1224] L. Angela Mihai and Alan W. Craig. Alternate strip-based substructuring algorithms for elliptic PDEs in two dimensions. *IMA Journal of Numerical Analysis*, 26(2):354–380, April 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/26/2/354>; <http://imanum.oxfordjournals.org/cgi/reprint/26/2/354>.

**Mihai:2009:ASB**

- [1225] L. Angela Mihai and Alan W. Craig. Alternate slice-based substructuring in three dimensions. *IMA Journal of Numerical Analysis*, 29(3):508–538, July 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/3/508>; <http://imajna.oxfordjournals.org/cgi/reprint/29/3/508>.

**Miller:1995:PUM**

- [1226] J. J. H. Miller, E. O’Riordan, and G. I. Shishkin. On piecewise-uniform meshes for upwind- and central-difference operators for solving singularly perturbed problems. *IMA Journal of Numerical Analysis*, 15(1):89–99, 1995. CODEN

IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Miller:1994:NNP**

- [1227] J. J. H. Miller and S. Wang. A new nonconforming Petrov–Galerkin finite-element method with triangular elements for a singularly perturbed advection-diffusion problem. *IMA Journal of Numerical Analysis*, 14(2): 257–276, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Miller:2001:FM**

- [1228] Keith Miller and Mike J. Baines. Least squares moving finite elements. *IMA Journal of Numerical Analysis*, 21(3): 621–642, July 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_03/210621.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_03/210621.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_03/pdf/210621.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_03/pdf/210621.pdf).

**Milner:1996:MFE**

- [1229] F. A. Milner and E.-J. Park. Mixed finite-element methods for Hamilton–Jacobi–Bellman-type equations. *IMA Journal of Numerical Analysis*, 16(3): 399–412, July 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_16/Issue\\_03/160399.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_03/160399.sgm.abs.html).

**Milovanovic:2011:GQR**

- [1230] Gradimir V. Milovanović and Aleksandar S. Cvetković. Gaussian quadrature rules using function derivatives. *IMA Journal of Numerical Analysis*, 31(1):358–377, Jan-

uary 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/1/358.full.pdf+html>.

**Milovanovic:2019:QMN**

- [1231] Gradimir V. Milovanović, Ramón Orive, and Miodrag M. Spalević. Quadratures with multiple nodes for Fourier–Chebyshev coefficients. *IMA Journal of Numerical Analysis*, 39(1): 271–296, January 25, 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/1/271/4629556>.

**Milovanovic:2009:EEG**

- [1232] Gradimir V. Milovanovic, Miodrag M. Spalevic, and Miroslav S. Pranic. Error estimates for Gauss–Turán quadratures and their Kronrod extensions. *IMA Journal of Numerical Analysis*, 29(3): 486–507, July 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/3/486>; <http://imajna.oxfordjournals.org/cgi/reprint/29/3/486>.

**Milstein:2001:NSD**

- [1233] G. N. Milstein and M. V. Tretyakov. Numerical solution of the Dirichlet problem for nonlinear parabolic equations by a probabilistic approach. *IMA Journal of Numerical Analysis*, 21(4): 887–917, October 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_04/210887.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_04/210887.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_04/210887.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_04/210887.pdf).

[//www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_04/pdf/210887.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_04/pdf/210887.pdf).

**Milstein:2002:PAS**

- [1234] G. N. Milstein and M. V. Tretyakov. A probabilistic approach to the solution of the Neumann problem for nonlinear parabolic equations. *IMA Journal of Numerical Analysis*, 22(4): 599–622, October 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_04/220599.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_04/220599.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_04/pdf/220599.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_04/pdf/220599.pdf).

**Milstein:2007:DFB**

- [1235] G. N. Milstein and M. V. Tretyakov. Discretization of forward–backward stochastic differential equations and related quasi-linear parabolic equations. *IMA Journal of Numerical Analysis*, 27(1):24–44, January 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/1/24>; <http://imajna.oxfordjournals.org/cgi/reprint/27/1/24>.

**Milstein:2003:QSM**

- [1236] Journal G. N. Milstein and M. V. Tretyakov. Quasi-symplectic methods for Langevin-type equations. *IMA Journal of Numerical Analysis*, 23(4): 593–626, October 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_04/230593.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_04/230593.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_04/pdf/230593.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_04/pdf/230593.pdf).

[//www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_04/pdf/230593.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_04/pdf/230593.pdf).

**Mirzaei:2012:GML**

- [1237] Davoud Mirzaei, Robert Schaback, and Mehdi Dehghan. On generalized moving least squares and diffuse derivatives. *IMA Journal of Numerical Analysis*, 32(3):983–1000, July 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/3/983.full.pdf+html>.

**Mitchell:2016:HEC**

- [1238] Tim Mitchell and Michael L. Overton. Hybrid expansion-contraction: a robust scaleable method for approximating the  $H_\infty$  norm. *IMA Journal of Numerical Analysis*, 36(3):985–1014, July 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/3/985>.

**Mittal:1991:HOF**

- [1239] R. C. Mittal and S. Gahlaut. High-order finite-difference schemes to solve Poisson’s equation in polar coordinates. *IMA Journal of Numerical Analysis*, 11(2):261–270, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Mommer:2006:SPF**

- [1240] Mario S. Mommer. A smoothness preserving fictitious domain method for elliptic boundary-value problems. *IMA Journal of Numerical Analysis*, 26(3): 503–524, July 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).



(electronic). URL <http://comjnl.oxfordjournals.org/cgi/content/abstract/26/3/503>; <http://comjnl.oxfordjournals.org/cgi/reprint/26/3/503>.

**Moore:1981:COA**

- [1241] G. Moore and A. Spence. The convergence of operator approximations at turning points. *IMA Journal of Numerical Analysis*, 1(1):23–38, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Moore:1986:OAS**

- [1242] G. Moore, A. Spence, and B. Werner. Operator approximation and symmetry-breaking bifurcation. *IMA Journal of Numerical Analysis*, 6(3):331–336, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Moore:1995:CPP**

- [1243] Gerald Moore. Computation and parametrization of periodic and connecting orbits. *IMA Journal of Numerical Analysis*, 15(2):245–263, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Moore:1999:ACS**

- [1244] Gerald Moore and Evelyne Hubert. Algorithms for constructing stable manifolds of stationary solutions. *IMA Journal of Numerical Analysis*, 19(3):375–424, July 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_03/190375.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_03/190375.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_03/pdf/190375.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_03/pdf/190375.pdf).

**Moosmuller:2019:ISV**

- [1245] Caroline Moosmüller and Nira Dyn. Increasing the smoothness of vector and Hermite subdivision schemes. *IMA Journal of Numerical Analysis*, 39(2):579–606, April 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/2/579/4955793>.

**Mora:2005:WES**

- [1246] Carlos M. Mora. Weak exponential schemes for stochastic differential equations with additive noise. *IMA Journal of Numerical Analysis*, 25(3):486–506, July 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/25/3/486>; <http://imanum.oxfordjournals.org/cgi/reprint/25/3/486>.

**Morales:2012:SQP**

- [1247] José Luis Morales, Jorge Nocedal, and Yuchen Wu. A sequential quadratic programming algorithm with an additional equality constrained phase. *IMA Journal of Numerical Analysis*, 32(2):553–579, April 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/2/553.full.pdf+html>.

**Moret:1990:PNM**

- [1248] Igor Moret and Pierpaolo Omari. A projective Newton method for semi-linear operator equations in Banach spaces. *IMA Journal of Numerical*

*Analysis*, 10(4):505–520, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Morton:1981:E**

- [1249] K. W. Morton and M. J. D. Powell. Editorial. *IMA Journal of Numerical Analysis*, 1(1):1, January 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Morton:1993:DCD**

- [1250] K. W. Morton and I. J. Sobey. Discretization of a convection-diffusion equation. *IMA Journal of Numerical Analysis*, 13(1):141–160, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Morton:1991:FVM**

- [1251] K. W. Morton and E. Süli. Finite volume methods and their analysis. *IMA Journal of Numerical Analysis*, 11(2):241–260, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Morton:2010:CDP**

- [1252] K. William Morton. The convection–diffusion Petrov–Galerkin story. *IMA Journal of Numerical Analysis*, 30(1):231–240, January 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/1/231>; <http://imajna.oxfordjournals.org/cgi/reprint/30/1/231>.

**Motte:1988:NCM**

- [1253] David L. Motte. The numerical computation of the minimal projection. *IMA Journal of Numerical Anal-*

*ysis*, 8(2):219–230, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Mu:2015:NWG**

- [1254] Lin Mu, Junping Wang, and Xiu Ye. A new weak Galerkin finite element method for the Helmholtz equation. *IMA Journal of Numerical Analysis*, 35(3):1228–1255, July 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/3/1228>.

**Mulansky:1992:CAS**

- [1255] Bernd Mulansky. Chebyshev approximation by spline functions with free knots. *IMA Journal of Numerical Analysis*, 12(1):95–105, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Mullenheim:1992:STP**

- [1256] Gregor Müllenheim. Solving two-point boundary value problems with spline functions. *IMA Journal of Numerical Analysis*, 12(4):503–518, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Murdoch:1992:CSS**

- [1257] T. Murdoch and C. J. Budd. Convergent and spurious solutions of nonlinear elliptic equations. *IMA Journal of Numerical Analysis*, 12(3):365–386, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). IMA Conference on Dynamics of Numerics and Numerics of Dynamics (Bristol, 1990).

**Mustapha:2011:IFD**

- [1258] Kassem Mustapha. An implicit finite-difference time-stepping method for a sub-diffusion equation, with spatial discretization by finite elements. *IMA Journal of Numerical Analysis*, 31(2):719–739, April 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/2/719.full.pdf+html>.

**Mustapha:2012:UCD**

- [1259] Kassem Mustapha and William McLean. Uniform convergence for a discontinuous galerkin, time-stepping method applied to a fractional diffusion equation. *IMA Journal of Numerical Analysis*, 32(3):906–925, July 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/3/906.full.pdf+html>.

**Mustapha:2010:SOA**

- [1260] Kassem Mustapha and Hussein Mustapha. A second-order accurate numerical method for a semilinear integro-differential equation with a weakly singular kernel. *IMA Journal of Numerical Analysis*, 30(2):555–578, April 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/2/555>; <http://imajna.oxfordjournals.org/cgi/reprint/30/2/555>.

**Mustapha:2014:WPV**

- [1261] Kassem Mustapha and Dominik Schötzau. Well-posedness of  $hp$ -version discontinuous Galerkin methods for fractional diffusion wave equations. *IMA Journal of Numerical Analysis*, 34(4):1426–1446, October 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/4/1426>.

**Nabet:2016:CFV**

- [1262] Flore Nabet. Convergence of a finite-volume scheme for the Cahn–Hilliard equation with dynamic boundary conditions. *IMA Journal of Numerical Analysis*, 36(4):1898–1942, October 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/4/1898>.

**Natale:2018:CVB**

- [1263] Andrea Natale and Colin J. Cotter. Corrigendum to: A variational  $H(\text{div})$  finite-element discretization approach for perfect incompressible fluids. *IMA Journal of Numerical Analysis*, 38(2):1084, April 18, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/2/1084/4774535>. See [1264].

**Natale:2018:VBH**

- [1264] Andrea Natale and Colin J. Cotter. A variational  $H(\text{div})$  finite-element discretization approach for perfect incompressible fluids. *IMA Journal of Numerical Analysis*, 38(3):

1388–1419, July 17, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/3/1388/3897379>. See corrigendum [1263].

**Navarrete:2016:ASI**

- [1265] Raymundo Navarrete and Divakar Viswanath. Accuracy and stability of inversion of power series. *IMA Journal of Numerical Analysis*, 36(1):421–436, January 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/1/421>.

**Navot:1987:EMT**

- [1266] I. Navot. An Euler–Maclaurin transformation of a slowly convergent series with an application to Fourier coefficient evaluation. *IMA Journal of Numerical Analysis*, 7(3):335–353, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Neuman:1983:PCP**

- [1267] Edward Neuman. Properties of a class of polynomial splines. *IMA Journal of Numerical Analysis*, 3(2):245–252, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Ng:1999:FIM**

- [1268] Michael K. Ng. Fast iterative methods for symmetric sinc-Galerkin systems. *IMA Journal of Numerical Analysis*, 19(3):357–373, July 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_03/190357.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_03/190357.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_03/pdf/190357.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_03/pdf/190357.pdf).

[//www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_03/pdf/190357.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_03/pdf/190357.pdf).

**Ngo:2017:EMA**

- [1269] Hoang-Long Ngo and Dai Taguchi. On the Euler–Maruyama approximation for one-dimensional stochastic differential equations with irregular coefficients. *IMA Journal of Numerical Analysis*, 37(4):1864–1883, October 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/1864/3074990>.

**Nguyen:2003:FEW**

- [1270] Hoang Nguyen and Rob Stevenson. Finite-element wavelets on manifolds. *IMA Journal of Numerical Analysis*, 23(1):149–173, January 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_01/230149.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_01/230149.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_01/pdf/230149.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_01/pdf/230149.pdf).

**Nguyen:2012:PCR**

- [1271] Son Luu Nguyen and G. Yin. Pathwise convergence rate for numerical solutions of stochastic differential equations. *IMA Journal of Numerical Analysis*, 32(2):701–723, April 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/2/701.full.pdf+html>.

**Nicaise:2005:CAF**

- [1272] Serge Nicaise and Karim Djadel. Con-

vergence analysis of a finite volume method for the Stokes system using non-conforming arguments. *IMA Journal of Numerical Analysis*, 25(3):523–548, July 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/25/3/523>; <http://imanum.oxfordjournals.org/cgi/reprint/25/3/523>.

**Nicaise:2008:PEE**

- [1273] Serge Nicaise, Katharina Witowski, and Barbara I. Wohlmuth. An a posteriori error estimator for the Lamé equation based on equilibrated fluxes. *IMA Journal of Numerical Analysis*, 28(2):331–353, April 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/2/331>; <http://imajna.oxfordjournals.org/cgi/reprint/28/2/331>.

**Nie:1985:LMF**

- [1274] Yi Yong Nie and Vidar Thomée. A lumped mass finite-element method with quadrature for a nonlinear parabolic problem. *IMA Journal of Numerical Analysis*, 5(4):371–396, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Nielsen:2009:PIL**

- [1275] Bjørn Fredrik Nielsen, Aslak Tveito, and Wolfgang Hackbusch. Preconditioning by inverting the Laplacian: an analysis of the eigenvalues. *IMA Journal of Numerical Analysis*, 29(1):24–42, January 2009. CODEN IJ-

NADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Nigam:2012:HOC**

- [1276] Nilima Nigam and Joel Phillips. High-order conforming finite elements on pyramids. *IMA Journal of Numerical Analysis*, 32(2):448–483, April 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/2/448.full.pdf+html>.

**Nochetto:2009:SDW**

- [1277] Ricardo H. Nochetto, Andreas Veiser, and Marco Verani. A safeguarded dual weighted residual method. *IMA Journal of Numerical Analysis*, 29(1):126–140, January 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Norton:2012:FEA**

- [1278] Richard A. Norton and Endre Süli. Finite element approximation of an  $H^1$  gradient flow of a double-well potential with bending energy. *IMA Journal of Numerical Analysis*, 32(4):1635–1661, October 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/4/1635.full.pdf+html>.

**Nurnberger:1998:EAI**

- [1279] G. Nürnberger and G. Walz. Error analysis in interpolation by bivariate  $C_1$ -splines. *IMA Journal of Numerical Analysis*, 18(4):485–508, October 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642

- (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_04/180485.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_04/180485.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_04/pdf/180485.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_04/pdf/180485.pdf). Oh:2014:NAA
- [1283] Minah Oh. A new approach to the analysis of axisymmetric problems. *IMA Journal of Numerical Analysis*, 34(4):1686–1700, October 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/4/1686>. Ohlberger:2002:AFV
- [1280] Sina Ober-Blöbaum. Galerkin variational integrators and modified symplectic Runge–Kutta methods. *IMA Journal of Numerical Analysis*, 37(1):375–406, January 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/1/375/2884280/Galerkin-variational-integrators-and-modified>. Oberman:2018:NMM
- [1281] Adam M. Oberman and Tiago Salvador. Numerical methods for motion of level sets by affine curvature. *IMA Journal of Numerical Analysis*, 38(4):1735–1767, October 16, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/4/1735/4085563>. Of:2006:FMM
- [1282] G. Of, O. Steinbach, and W. L. Wendland. The fast multipole method for the symmetric boundary integral formulation. *IMA Journal of Numerical Analysis*, 26(2):272–296, April 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/26/2/272>; <http://imanum.oxfordjournals.org/cgi/reprint/26/2/272>. Oliver:1982:AEP
- [1285] J. Oliver. The accurate evaluation of polynomial approximations to library functions. *IMA Journal of Numerical Analysis*, 2(1):63–72, January 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). Oliver:1982:FLM
- [1286] P. Oliver. A family of linear multi-step methods for the solution of stiff and nonstiff ODEs. *IMA Journal of Numerical Analysis*, 2(3):289–301, July 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Olshanskii:2014:SFE**

- [1287] Maxim A. Olshanskii, Arnold Reusken, and Xianmin Xu. A stabilized finite element method for advection-diffusion equations on surfaces. *IMA Journal of Numerical Analysis*, 34(2):732–758, April 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/2/732.full.pdf+html>.

**Olver:1982:FDR**

- [1288] F. W. J. Olver. Further developments of *rp* and *ap* error analysis. *IMA Journal of Numerical Analysis*, 2(3):249–274, July 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Olver:1983:EBA**

- [1289] F. W. J. Olver. Error bounds for arithmetic operations on computers without guard digits. *IMA Journal of Numerical Analysis*, 3(2):153–160, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Olver:1986:EBP**

- [1290] F. W. J. Olver. Error bounds for polynomial evaluation and complex arithmetic. *IMA Journal of Numerical Analysis*, 6(3):373–379, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Olver:1982:PEB**

- [1291] F. W. J. Olver and J. H. Wilkinson. A posteriori error bounds for Gaussian elimination. *IMA Journal of Numerical Analysis*, 2(4):377–406, October 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Olver:2006:MFN**

- [1292] Sheehan Olver. Moment-free numerical integration of highly oscillatory functions. *IMA Journal of Numerical Analysis*, 26(2):213–227, April 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/26/2/213>; <http://imanum.oxfordjournals.org/cgi/reprint/26/2/213>.

**Omladic:1992:AQF**

- [1293] Matjaž Omladič. Average quadrature formulas of Gauss type. *IMA Journal of Numerical Analysis*, 12(2):189–199, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Ortner:2011:NFE**

- [1294] Christoph Ortner. Nonconforming finite-element discretization of convex variational problems. *IMA Journal of Numerical Analysis*, 31(3):847–864, July 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/3/847.full.pdf+html>.

**Ortner:2014:PEC**

- [1295] Christoph Ortner and Hao Wang. A posteriori error control for a quasi-continuum approximation of a periodic chain. *IMA Journal of Numerical Analysis*, 34(3):977–1001, July 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/3/977>.

**Osada:1992:MOS**

- [1296] Naoki Osada. A method for obtaining sequence transformations. *IMA Journal of Numerical Analysis*, 12(1):85–94, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Osborne:1992:EMC**

- [1297] M. R. Osborne. An effective method for computing regression quantiles. *IMA Journal of Numerical Analysis*, 12(2):151–166, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Osborne:2010:ABL**

- [1298] M. R. Osborne. Asymptotic behaviour in linear least squares problems. *IMA Journal of Numerical Analysis*, 30(1):241–247, January 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/1/241>; <http://imajna.oxfordjournals.org/cgi/reprint/30/1/241>.

**Osborne:2000:NAV**

- [1299] M. R. Osborne, Brett Presnell, and B. A. Turlach. A new approach to variable selection in least squares problems. *IMA Journal of Numerical Analysis*, 20(3):389–403, July 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_03/200389.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_03/200389.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_03/pdf/200389.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_03/pdf/200389.pdf).

**Osborne:1999:NAS**

- [1300] M. R. Osborne and Linping Sun. A new approach to symmetric rank-one updating. *IMA Journal of Numerical Analysis*, 19(4):497–507, October 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_04/190497.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_04/190497.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_04/pdf/190497.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_04/pdf/190497.pdf).

**Ostermann:1990:HEE**

- [1301] Alexander Ostermann. A half-explicit extrapolation method for differential-algebraic systems of index 3. *IMA Journal of Numerical Analysis*, 10(2):171–180, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Ostermann:2000:NSD**

- [1302] Alexander Ostermann and Mechthild Thalhammer. Non-smooth data error estimates for linearly implicit Runge–Kutta methods. *IMA Journal of Numerical Analysis*, 20(2):167–184, April 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_02/200167.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_02/200167.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_02/pdf/200167.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_02/pdf/200167.pdf).

**Oswald:1998:OMP**

- [1303] Peter Oswald. An optimal multi-level preconditioner for solenoidal approximations of the two-dimensional Stokes problem. *IMA Journal of Numerical Analysis*, 18(2):207–228,



- April 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_02/180207.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_02/180207.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_02/pdf/180207.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_02/pdf/180207.pdf). **Oyarzua:2014:EDF**
- [1304] Ricardo Oyarzúa, Tong Qin, and Dominik Schötzau. An exactly divergence-free finite element method for a generalized Boussinesq problem. *IMA Journal of Numerical Analysis*, 34(3):1104–1135, July 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/3/1104>. **Pachon:2010:PSC**
- [1305] Ricardo Pachón, Rodrigo B. Platte, and Lloyd N. Trefethen. Piecewise-smooth chebfuns. *IMA Journal of Numerical Analysis*, 30(4):898–916, October 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/30/4/898.full.pdf+html>. **Palagallo:1987:NBA**
- [1306] Judith A. Palagallo and Thomas E. Price, Jr. Near-best approximation by averaging polynomial interpolants. *IMA Journal of Numerical Analysis*, 7(1):107–122, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). **Palencia:1984:ETI**
- [1307] C. Palencia and J. M. Sanz-Serna. Equivalence theorems for incomplete spaces: an appraisal. *IMA Journal of Numerical Analysis*, 4(1):109–115, January 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). **Pan:1994:MCC**
- [1308] K. Pan. On Mason’s conjecture concerning interpolation by polynomials in  $z$  and  $z^{-1}$  on an annulus. *IMA Journal of Numerical Analysis*, 14(4):599–604, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). **Pani:1991:FEG**
- [1309] A. K. Pani and P. C. Das. A finite element Galerkin method for a unidimensional single-phase nonlinear Stefan problem with Dirichlet boundary conditions. *IMA Journal of Numerical Analysis*, 11(1):99–113, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). **Pani:1991:PEE**
- [1310] A. K. Pani and P. C. Das. A priori error estimates for a single-phase quasilinear Stefan problem in one space dimension. *IMA Journal of Numerical Analysis*, 11(3):377–392, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). **Pani:1999:QMP**
- [1311] Amiya K. Pani. A quallocation method for parabolic partial differential equations. *IMA Journal of Numerical Analysis*, 19(3):473–495, July 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_03/190473.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_03/190473.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_03/pdf/190473.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_03/pdf/190473.pdf).

- [//www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_03/pdf/190473.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_03/pdf/190473.pdf).
- Pani:2002:HGM**
- [1312] Amiya K. Pani and Graeme Fairweather.  $H^1$ -Galerkin mixed finite element methods for parabolic partial integro-differential equations. *IMA Journal of Numerical Analysis*, 22(2): 231–252, April 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_02/220231.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_02/220231.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_02/pdf/220231.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_02/pdf/220231.pdf).
- Pani:2005:SFE**
- [1313] Amiya K. Pani and Jin Yun Yuan. Semidiscrete finite element Galerkin approximations to the equations of motion arising in the Oldroyd model. *IMA Journal of Numerical Analysis*, 25(4):750–782, October 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/reprint/25/4/750>.
- Pani:2010:AOS**
- [1314] Amiya Kumar Pani, Graeme Fairweather, and Ryan I. Fernandes. ADI orthogonal spline collocation methods for parabolic partial integro-differential equations. *IMA Journal of Numerical Analysis*, 30(1):248–276, January 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/1/248>; <http://imajna.oxfordjournals.org/cgi/reprint/30/1/248>.
- Papamichael:1993:NMC**
- [1315] N. Papamichael, M. J. Soares, and N. S. Stylianopoulos. A numerical method for the computation of Faber polynomials for starlike domains. *IMA Journal of Numerical Analysis*, 13(2):181–193, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Papamichael:1986:PCN**
- [1316] N. Papamichael and Maria Joana Soares. A posteriori corrections for nonperiodic cubic and quintic interpolating splines at equally spaced knots. *IMA Journal of Numerical Analysis*, 6(4):489–502, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Papez:2018:RBP**
- [1317] Jan Papez and Zdenek Strakos. On a residual-based a posteriori error estimator for the total error. *IMA Journal of Numerical Analysis*, 38(3): 1164–1184, July 17, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/3/1164/4124871>.
- Parlett:1981:TPL**
- [1318] B. N. Parlett and J. K. Reid. Tracking the progress of the Lanczos algorithm for large symmetric eigenproblems. *IMA Journal of Numerical Analysis*, 1(2):135–155, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Pechstein:2013:WPI**
- [1319] Clemens Pechstein and Robert Scheichl. Weighted Poincaré inequality.

- ities. *IMA Journal of Numerical Analysis*, 33(2):652–686, April 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/2/652.full.pdf+html>.
- Pejcev:2012:EBG**
- [1320] Aleksandar V. Pejcev and Miodrag M. Spalević. Error bounds for Gaussian quadrature formulae with Bernstein–Szegő weights that are rational modifications of Chebyshev weight functions of the second kind. *IMA Journal of Numerical Analysis*, 32(4):1733–1754, October 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/4/1733.full.pdf+html>.
- Pena:1996:PSL**
- [1321] J. M. Peña. Pivoting strategies leading to small bounds of the errors for certain linear systems. *IMA Journal of Numerical Analysis*, 16(2):141–153, April 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_16/Issue\\_02/160141.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_02/160141.sgm.abs.html).
- Phillips:2010:SRQ**
- [1322] George M. Phillips. A survey of results on the  $q$ -Bernstein polynomials. *IMA Journal of Numerical Analysis*, 30(1):277–288, January 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/1/277>; <http://imajna.oxfordjournals.org/cgi/reprint/30/1/277>.
- Phillips:1985:EMC**
- [1323] Timothy N. Phillips. An embedding method for the Cauchy–Riemann equations. *IMA Journal of Numerical Analysis*, 5(4):429–436, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Phillips:1988:LCG**
- [1324] Timothy N. Phillips. On the Legendre coefficients of a general-order derivative of an infinitely differentiable function. *IMA Journal of Numerical Analysis*, 8(4):455–459, October 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Phillips:1989:FSS**
- [1325] Timothy N. Phillips. Fourier series solutions to Poisson’s equation in rectangularly decomposable regions. *IMA Journal of Numerical Analysis*, 9(3):337–352, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Phillips:1986:PSM**
- [1326] Timothy N. Phillips, Thomas A. Zang, and M. Yousuff Hussaini. Preconditioners for the spectral multigrid method. *IMA Journal of Numerical Analysis*, 6(3):273–292, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Pickering:1993:FSR**
- [1327] W. M. Pickering and P. J. Harley. FFT solution of the Robbins problem. *IMA Journal of Numerical Analysis*, 13(2):215–233, 1993. CODEN IJ-

NADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Pierre:2010:UCF**

- [1328] Morgan Pierre. Uniform convergence for a finite-element discretization of a viscous diffusion equation. *IMA Journal of Numerical Analysis*, 30(2):487–511, April 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/2/487>; <http://imajna.oxfordjournals.org/cgi/reprint/30/2/487>.

**Pinar:2018:BPA**

- [1329] Miguel A. Piñar and Yuan Xu. Best polynomial approximation on the unit ball. *IMA Journal of Numerical Analysis*, 38(3):1209–1228, July 17, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/3/1209/3852524>.

**Pinar:1999:SLI**

- [1330] Mustafa Ç. Pinar and Bintong Chen.  $l_1$  solution of linear inequalities. *IMA Journal of Numerical Analysis*, 19(1):19–37, January 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_01/190019.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_01/190019.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_01/pdf/190019.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_01/pdf/190019.pdf).

**Ma:2001:CLL**

- [1331] He ping Ma and Ben yu Guo. Composite Legendre-Laguerre pseudospectral approximation in unbounded domains. *IMA Journal of Numerical Analysis*, 21

(2):587–602, April 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_02/210587.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_02/210587.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_02/pdf/210587.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_02/pdf/210587.pdf).

**Pinkus:1988:BAC**

- [1332] A. Pinkus and H. Strauss. Best approximation with coefficient constraints. *IMA Journal of Numerical Analysis*, 8(1):1–22, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Platte:2011:HFD**

- [1333] Rodrigo B. Platte. How fast do radial basis function interpolants of analytic functions converge? *IMA Journal of Numerical Analysis*, 31(4):1578–1597, October 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/4/1578.full.pdf+html>.

**Plestenjak:2001:CMW**

- [1334] Bor Plestenjak. A continuation method for a weakly elliptic two-parameter eigenvalue problem. *IMA Journal of Numerical Analysis*, 21(1):199–216, January 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/210199.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210199.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/pdf/210199.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210199.pdf).

**Poghosyan:2011:ACP**

- [1335] Arnak Poghosyan. On an auto-correction phenomenon of the Krylov–

Gottlieb–Eckhoff method. *IMA Journal of Numerical Analysis*, 31(2):512–527, April 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/2/512.full.pdf+html>.

**Pooley:2003:NCP**

- [1336] D. M. Pooley, P. A. Forsyth, and K. R. Vetzal. Numerical convergence properties of option pricing PDEs with uncertain volatility. *IMA Journal of Numerical Analysis*, 23(2):241–267, April 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_02/230241.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_02/230241.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_02/pdf/230241.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_02/pdf/230241.pdf).

**Porter:1993:RGM**

- [1337] D. Porter and D. S. G. Stirling. The re-iterated Galerkin method. *IMA Journal of Numerical Analysis*, 13(1):125–139, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Potra:1994:LOM**

- [1338] F. A. Potra and E. Venturino. Low-order methods for Cauchy principal value integrals with endpoint singularities. *IMA Journal of Numerical Analysis*, 14(2):295–310, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Potts:2001:NLA**

- [1339] Daniel Potts and Gabriele Steidl. A new linogram algorithm for computerized tomography. *IMA Jour-*

*nal of Numerical Analysis*, 21(3):769–782, July 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_03/210769.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_03/210769.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_03/pdf/210769.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_03/pdf/210769.pdf).

**Pötzsche:2010:CIM**

- [1340] Christian Pötzsche and Martin Rasmussen. Computation of integral manifolds for Carathéodory differential equations. *IMA Journal of Numerical Analysis*, 30(2):401–430, April 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/2/401>; <http://imajna.oxfordjournals.org/cgi/reprint/30/2/401>.

**Poullikkas:1998:MFS**

- [1341] A. Poullikkas, A. Karageorghis, and G. Georgiou. The method of fundamental solutions for Signorini problems. *IMA Journal of Numerical Analysis*, 18(2):273–285, April 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_02/180273.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_02/180273.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_02/pdf/180273.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_02/pdf/180273.pdf).

**Powell:2005:PFH**

- [1342] Catherine E. Powell. Parameter-free  $H$  (div) preconditioning for a mixed finite element formulation of diffusion problems. *IMA Journal of Numerical Analysis*, 25(4):783–796, October 2005. CODEN IJNADH.

ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/reprint/25/4/783>.

**Powell:2009:BDP**

- [1343] Catherine E. Powell and Howard C. Elman. Block-diagonal preconditioning for spectral stochastic finite-element systems. *IMA Journal of Numerical Analysis*, 29(2):350–375, April 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/2/350>; <http://imajna.oxfordjournals.org/cgi/reprint/29/2/350>.

**Powell:1998:TSA**

- [1344] M. J. D. Powell. A “taut string algorithm” for straightening a piecewise linear path in two dimensions. *IMA Journal of Numerical Analysis*, 18(1):1–35, January 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_01/180001.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_01/180001.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_01/pdf/180001.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_01/pdf/180001.pdf).

**Powell:2008:DNM**

- [1345] M. J. D. Powell. Developments of NEWUOA for minimization without derivatives. *IMA Journal of Numerical Analysis*, 28(4):649–664, October 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/4/649>.

**Powell:2010:CWR**

- [1346] M. J. D. Powell. On the convergence of a wide range of trust region methods for unconstrained optimization. *IMA Journal of Numerical Analysis*, 30(1):289–301, January 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/1/289>; <http://imajna.oxfordjournals.org/cgi/reprint/30/1/289>.

**Powell:1981:STP**

- [1347] M. J. D. Powell and Ph. L. Toint. The Shanno-Toint procedure for updating sparse symmetric matrices. *IMA Journal of Numerical Analysis*, 1(4):403–413, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Powell:1984:CSC**

- [1348] M. J. D. Powell and Y. Yuan. Conditions for superlinear convergence in  $l_1$  and  $l_\infty$  solutions of overdetermined nonlinear equations. *IMA Journal of Numerical Analysis*, 4(2):241–251, April 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Pozza:2017:GQQ**

- [1349] Stefano Pozza, Miroslav S. Pranić, and Zdenek Strakos. Gauss quadrature for quasi-definite linear functionals. *IMA Journal of Numerical Analysis*, 37(3):1468–1495, July 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/>

article/37/3/1468/2670009/Gauss-quadrature-for-quasi-definite-linear.

**Pozzi:2005:DDP**

- [1350] Paola Pozzi. The discrete Douglas problem: convergence results. *IMA Journal of Numerical Analysis*, 25(2):337–378, April 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/25/2/337>; <http://imanum.oupjournals.org/cgi/reprint/25/2/337>.

**Pozzi:2019:EFI**

- [1351] Paola Pozzi and Björn Stinner. Elastic flow interacting with a lateral diffusion process: the one-dimensional graph case. *IMA Journal of Numerical Analysis*, 39(1):201–234, January 25, 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/1/201/4904296>.

**Pozzolini:2013:VIP**

- [1352] C. Pozzolini, Y. Renard, and M. Salaun. Vibro-impact of a plate on rigid obstacles: existence theorem, convergence of a scheme and numerical simulations. *IMA Journal of Numerical Analysis*, 33(1):261–294, January 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/1/261.full.pdf+html>.

**Prautzsch:1986:LCP**

- [1353] Hartmut Prautzsch. The location of the control points in the case of box splines. *IMA Journal of Numerical*

*Analysis*, 6(1):43–49, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Preston:2011:NMB**

- [1354] Mark D. Preston, Peter G. Chamberlain, and Simon N. Chandler-Wilde. A Nyström method for a boundary value problem arising in unsteady water wave problems. *IMA Journal of Numerical Analysis*, 31(3):1123–1153, July 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/3/1123.full.pdf+html>.

**Priestley:1994:PNC**

- [1355] A. Priestley. The positive and nearly conservative Lagrange–Galerkin method. *IMA Journal of Numerical Analysis*, 14(2):277–294, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Priestley:1997:MPN**

- [1356] A. Priestley. The multidimensional positive and nearly conservative Lagrange–Galerkin method. Part II: The use of  $C^1$  elements. *IMA Journal of Numerical Analysis*, 17(2):177–199, April 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_17/Issue\\_02/170177.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_02/170177.sgm.abs.html).

**Pruess:1993:SPC**

- [1357] Steven Pruess. Shape preserving  $C^2$  cubic spline interpolation. *IMA Journal of Numerical Analysis*, 13(4):493–507, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Pryce:1985:MEA**

- [1358] J. D. Pryce. Multiplicative error analysis of matrix transformation algorithms. *IMA Journal of Numerical Analysis*, 5(4):437–445, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Pryce:1986:ECP**

- [1359] J. D. Pryce. Error control of phase-function shooting methods for Sturm–Liouville problems. *IMA Journal of Numerical Analysis*, 6(1):103–123, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Pryce:1989:CIR**

- [1360] J. D. Pryce. On the convergence of iterated remeshing. *IMA Journal of Numerical Analysis*, 9(3):315–335, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Pytlak:1994:CCG**

- [1361] R. Pytlak. On the convergence of conjugate gradient algorithms. *IMA Journal of Numerical Analysis*, 14(3):443–460, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Qi:2011:ALD**

- [1362] Houduo Qi and Defeng Sun. An augmented Lagrangian dual approach for the  $H$ -weighted nearest correlation matrix problem. *IMA Journal of Numerical Analysis*, 31(2):491–511, April 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/2/491.full.pdf+html>.

**Qiu:2016:SHM**

- [1363] Weifeng Qiu and Ke Shi. A superconvergent HDG method for the incompressible Navier–Stokes equations on general polyhedral meshes. *IMA Journal of Numerical Analysis*, 36(4):1943–1967, October 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/4/1943>.

**Quell:2000:NSE**

- [1364] Peter Quell. Nonlinear stability of entropy flux splitting schemes on bounded domains. *IMA Journal of Numerical Analysis*, 20(3):441–459, July 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_03/200441.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_03/200441.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_03/pdf/200441.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_03/pdf/200441.pdf).

**Radu:2018:RMC**

- [1365] Florin A. Radu, Kundan Kumar, Jan M. Nordbotten, and Iuliu S. Pop. A robust, mass conservative scheme for two-phase flow in porous media including Hölder continuous nonlinearities. *IMA Journal of Numerical Analysis*, 38(2):884–920, April 18, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/2/884/3883930>.

**Raina:1983:COQ**

- [1366] B. L. Raina and N. Kaul. A class of optimal quadrature formulae. *IMA Journal of Numerical Analysis*, 3(1):119–125, 1983. CODEN IJNADH. ISSN



0272-4979 (print), 1464-3642 (electronic).

**Rasch:2009:RIF**

- [1367] Christian Rasch and Thomas Satzger. Remarks on the implementation of the fast marching method. *IMA Journal of Numerical Analysis*, 29(3):806–813, July 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/3/806>; <http://imajna.oxfordjournals.org/cgi/reprint/29/3/806>.

**Rathsfeld:1996:EEE**

- [1368] Andreas Rathsfeld. Error estimates and extrapolation for the numerical solution of Mellin convolution equations. *IMA Journal of Numerical Analysis*, 16(2):217–255, April 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_16/Issue\\_02/160217.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_02/160217.sgm.abs.html).

**Raydan:1993:BBC**

- [1369] Marcos Raydan. On the Barzilai and Borwein choice of steplength for the gradient method. *IMA Journal of Numerical Analysis*, 13(3):321–326, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Rebollo:2018:TDM**

- [1370] T. Chacon Rebollo and D. Yakoubi. A three-dimensional model for two coupled turbulent fluids: numerical analysis of a finite element approximation. *IMA Journal of Numerical Analysis*, 38(4):1927–1958, October 16, 2018. CODEN IJNADH. ISSN 0272-4979

(print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/4/1927/4099779>.

**Reddy:2015:RVR**

- [1371] G. Murali Mohan Reddy and Rajen K. Sinha. Ritz–Volterra reconstructions and a posteriori error analysis of finite element method for parabolic integro-differential equations. *IMA Journal of Numerical Analysis*, 35(1):341–371, January 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/1/341>.

**Reginska:1986:SEA**

- [1372] Teresa Regińska. Superconvergence of external approximation of eigenvalues of ordinary differential operators. *IMA Journal of Numerical Analysis*, 6(3):309–323, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Reifenberg:2000:NSB**

- [1373] Michèle Reifenberg and Jean-Paul Berrut. Numerical solution of boundary integral equations by means of attenuation factors. *IMA Journal of Numerical Analysis*, 20(1):25–46, January 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_01/200025.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_01/200025.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_01/pdf/200025.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_01/pdf/200025.pdf).

**Reisinger:2013:ALD**

- [1374] Christoph Reisinger. Analysis of linear difference schemes in the sparse

grid combination technique. *IMA Journal of Numerical Analysis*, 33(2):544–581, April 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/2/544.full.pdf+html>.

**Reisinger:2014:INT**

- [1375] Christoph Reisinger and Alan Whitley. The impact of a natural time change on the convergence of the Crank–Nicolson scheme. *IMA Journal of Numerical Analysis*, 34(3):1156–1192, July 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/3/1156>.

**Ren:2016:APS**

- [1376] Zhi-Ru Ren and Yang Cao. An alternating positive-semidefinite splitting preconditioner for saddle point problems from time-harmonic eddy current models. *IMA Journal of Numerical Analysis*, 36(2):922–946, April 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/2/922>.

**Fang:2011:SAB**

- [1377] Haw ren Fang. Stability analysis of block  $LDL^T$  factorization for symmetric indefinite matrices. *IMA Journal of Numerical Analysis*, 31(2):528–555, April 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/2/528.full.pdf+html>.

**Repin:2011:GRE**

- [1378] Sergey I. Repin and Satyendra K. Tomar. Guaranteed and robust error bounds for nonconforming approximations of elliptic problems. *IMA Journal of Numerical Analysis*, 31(2):597–615, April 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/2/597.full.pdf+html>.

**Reusken:2015:ATF**

- [1379] Arnold Reusken. Analysis of trace finite element methods for surface partial differential equations. *IMA Journal of Numerical Analysis*, 35(4):1568–1590, October 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/4/1568>.

**Riess:1982:MPE**

- [1380] R. D. Riess, L. W. Johnson, and J. Chen. Maximum precision in Elliott–Donaldson formulae. *IMA Journal of Numerical Analysis*, 2(4):429–435, October 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Rivlin:1983:ORD**

- [1381] T. J. Rivlin, St. Ruscheweyh, D. Shaffer, and K.-J. Wirths. Optimal recovery of the derivative of bounded analytic functions. *IMA Journal of Numerical Analysis*, 3(3):327–332, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Robinson:1992:VBE**

- [1382] P. D. Robinson and A. J. Wathen. Variational bounds on the entries of the inverse of a matrix. *IMA Journal of Numerical Analysis*, 12(4):463–486, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Rodriguez:2017:GST**

- [1383] Ana Alonso Rodríguez, Jessika Camaño, Riccardo Ghiloni, and Alberto Valli. Graphs, spanning trees and divergence-free finite elements in domains of general topology. *IMA Journal of Numerical Analysis*, 37(4):1986–2003, October 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/1986/2670302>.

**Rodriguez:2004:MFE**

- [1384] Ana Alonso Rodríguez, Ralf Hiptmair, and Alberto Valli. Mixed finite element approximation of eddy current problems. *IMA Journal of Numerical Analysis*, 24(2):255–271, April 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_02/240255.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_02/240255.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_02/pdf/240255.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_02/pdf/240255.pdf).

**Rodriguez:1993:NIL**

- [1385] G. Rodriguez and S. Seatzu. On the numerical inversion of the Laplace transform in reproducing kernel Hilbert spaces. *IMA Journal of Numerical Analysis*, 13(3):463–475, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Romani:2016:EEC**

- [1386] Lucia Romani, Victoria Hernández Mederos, and Jorge Estrada Sarlabous. Exact evaluation of a class of nonstationary approximating subdivision algorithms and related applications. *IMA Journal of Numerical Analysis*, 36(1):380–399, January 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/1/380>.

**Roos:1996:NCU**

- [1387] Hans-Görg Roos. A note on the conditioning of upwind schemes on Shishkin meshes. *IMA Journal of Numerical Analysis*, 16(4):529–538, October 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_16/Issue\\_04/160529.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_04/160529.sgm.abs.html).

**Rottmann-Matthes:2019:IRS**

- [1388] Jens Rottmann-Matthes. An IMEX-RK scheme for capturing similarity solutions in the multidimensional Burgers’s equation. *IMA Journal of Numerical Analysis*, 39(1):342–373, January 25, 2019. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/39/1/342/4591646>.

**Rovas:2006:RBO**

- [1389] D. V. Rovas, L. Machiels, and Y. Maday. Reduced-basis output bound methods for parabolic problems. *IMA Journal of Numerical Analysis*, 26(3):423–445, July 2006. CODEN IJNADH.

ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://comjnl.oxfordjournals.org/cgi/content/abstract/26/3/423>; <http://comjnl.oxfordjournals.org/cgi/reprint/26/3/423>.

**Rump:2003:OSN**

- [1390] Siegfried M. Rump. Optimal scaling for  $p$ -norms and componentwise distance to singularity. *IMA Journal of Numerical Analysis*, 23(1): 1–9, January 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_01/230001.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_01/230001.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_01/pdf/230001.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_01/pdf/230001.pdf).

**Rumpf:2015:VTD**

- [1391] Martin Rumpf and Benedikt Wirth. Variational time discretization of geodesic calculus. *IMA Journal of Numerical Analysis*, 35(3):1011–1046, July 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/3/1011>.

**Russo:2011:HFE**

- [1392] Anahí Dello Russo and Ana Alonso. Hybrid finite element analysis of fluid-structure systems with coupling on curved interfaces. *IMA Journal of Numerical Analysis*, 31(4):1636–1682, October 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/4/1636.full.pdf+html>.

**Sablonniere:1987:EBH**

- [1393] Paul Sablonnière. Error bounds for Hermite interpolation by quadratic splines on an  $\alpha$ -triangulation. *IMA Journal of Numerical Analysis*, 7(4): 495–508, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Saedpanah:2015:CGF**

- [1394] Fardin Saedpanah. Continuous Galerkin finite element methods for hyperbolic integro-differential equations. *IMA Journal of Numerical Analysis*, 35(2):885–908, April 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/2/885>.

**Saito:2007:CUF**

- [1395] Norikazu Saito. Conservative upwind finite-element method for a simplified Keller–Segel system modelling chemotaxis. *IMA Journal of Numerical Analysis*, 27(2):332–365, April 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/2/332>; <http://imajna.oxfordjournals.org/cgi/reprint/27/2/332>.

**Salane:1981:SMN**

- [1396] D. Salane and R. P. Tewarson. On symmetric minimum norm updates. *IMA Journal of Numerical Analysis*, 1(2):235–240, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Salaun:2015:LOF**

- [1397] Michel Salaün and Stéphanie Salmon. Low-order finite element method for the well-posed bidimensional Stokes problem. *IMA Journal of Numerical Analysis*, 35(1):427–453, January 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/1/427>.

**Sander:2016:GFE**

- [1398] Oliver Sander. Geodesic finite elements of higher order. *IMA Journal of Numerical Analysis*, 36(1):238–266, January 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/1/238>.

**Sandstede:1997:CEN**

- [1399] Björn Sandstede. Convergence estimates for the numerical approximation of homoclinic solutions. *IMA Journal of Numerical Analysis*, 17(3):437–462, July 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_17/Issue\\_03/170437.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_03/170437.sgm.abs.html).

**Santos:1988:FEM**

- [1400] Juan Enrique Santos, Jim Douglas, Jr., Mary E. Morley, and Oscar M. Lovera. Finite element methods for a model for full waveform acoustic logging. *IMA Journal of Numerical Analysis*, 8(4):415–433, October 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Santos-Palomo:2006:UDU**

- [1401] Ángel Santos-Palomo and Pablo Guerrero-García. Updating and down-dating an upper trapezoidal sparse orthogonal factorization. *IMA Journal of Numerical Analysis*, 26(1):1–10, January 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/26/1/1>; <http://imanum.oxfordjournals.org/cgi/reprint/26/1/1>.

**Sanz-Serna:1981:LIV**

- [1402] J. M. Sanz-Serna. Linearly implicit variable coefficient methods of Lambert–Sigurdsson type. *IMA Journal of Numerical Analysis*, 1(1):39–45, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Sanz-Serna:2009:MFE**

- [1403] J. M. Sanz-Serna. Modulated Fourier expansions and heterogeneous multiscale methods. *IMA Journal of Numerical Analysis*, 29(3):595–605, July 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/3/595>; <http://imajna.oxfordjournals.org/cgi/reprint/29/3/595>.

**Sanz-Serna:1991:NCR**

- [1404] J. M. Sanz-Serna and D. F. Griffiths. A new class of results for the algebraic equations of implicit Runge–Kutta processes. *IMA Journal of Numerical Analysis*, 11(4):449–455, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

- Sanz-Serna:1992:NUT**
- [1405] J. M. Sanz-Serna and A. M. Stuart. A note on uniform in time error estimates for approximations to reaction-diffusion equations. *IMA Journal of Numerical Analysis*, 12(3):457–462, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). IMA Conference on Dynamics of Numerics and Numerics of Dynamics (Bristol, 1990).
- Sanz-Serna:1986:CNS**
- [1406] J. M. Sanz-Serna and J. G. Verwer. Conservative and nonconservative schemes for the solution of the nonlinear Schrödinger equation. *IMA Journal of Numerical Analysis*, 6(1):25–42, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Saranen:1992:QML**
- [1407] J. Saranen and Ian H. Sloan. Quadrature methods for logarithmic-kernel integral equations on closed curves. *IMA Journal of Numerical Analysis*, 12(2):167–187, 1992. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Sardella:2000:CFE**
- [1408] Mirko Sardella. On a coupled finite element–finite volume method for convection-diffusion problems. *IMA Journal of Numerical Analysis*, 20(2):281–301, April 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_02/200281.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_02/200281.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_02/pdf/200281.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_02/pdf/200281.pdf).
- Saunders:1984:VIS**
- [1409] R. Saunders, J. Caldwell, and P. Wandles. A variational-iterative scheme applied to Burgers’ equation. *IMA Journal of Numerical Analysis*, 4(3):349–362, July 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Sauter:2010:REA**
- [1410] Martin Sauter and Christian Wieners. Robust estimates for the approximation of the dynamic consolidation problem. *IMA Journal of Numerical Analysis*, 30(3):832–856, July 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/3/832>; <http://imajna.oxfordjournals.org/cgi/reprint/30/3/832>.
- Sauter:2014:RBI**
- [1411] S. Sauter and A. Veit. Retarded boundary integral equations on the sphere: exact and numerical solution. *IMA Journal of Numerical Analysis*, 34(2):675–699, April 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/2/675.full.pdf+html>.
- Sayer:1983:SAI**
- [1412] F. P. Sayer. Some aspects of infinite systems of linear simultaneous equations. *IMA Journal of Numerical Analysis*, 3(3):333–340, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Schagen:1984:SEU**

- [1413] I. P. Schagen. Sequential exploration of unknown multidimensional functions as an aid to optimization. *IMA Journal of Numerical Analysis*, 4(3): 337–347, July 1984. CODEN IJ-NADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Schatzle:2000:PZC**

- [1414] Reiner Schätzle. On the perturbation of the zeros of complex polynomials. *IMA Journal of Numerical Analysis*, 20(2):185–202, April 2000. CODEN IJ-NADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_02/200185.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_02/200185.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_02/pdf/200185.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_02/pdf/200185.pdf).

**Schechter:1995:RCN**

- [1415] Stephen Schechter. Rate of convergence of numerical approximations to homoclinic bifurcation points. *IMA Journal of Numerical Analysis*, 15(1):23–60, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Schittkowski:1983:NSC**

- [1416] Klaus Schittkowski. The numerical solution of constrained linear least-squares problems. *IMA Journal of Numerical Analysis*, 3(1):11–36, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Schmitt:2001:EAR**

- [1417] Bernhard A. Schmitt and Rüdiger Weiner. Equilibrium attractivity of Runge–Kutta methods. *IMA Journal of Numerical Analysis*, 21(1):327–

348, January 2001. CODEN IJ-NADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/210327.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210327.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/pdf/210327.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210327.pdf).

**Schmitt:2018:PHV**

- [1418] Jeremy M. Schmitt and Melvin Leok. Properties of Hamiltonian variational integrators. *IMA Journal of Numerical Analysis*, 38(1):377–398, January 25, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/1/377/3065609>.

**Schoberl:2008:ASP**

- [1419] Joachim Schöberl, Jens M. Melenk, Clemens Pechstein, and Sabine Zaiglmayr. Additive Schwarz preconditioning for  $p$ -version triangular and tetrahedral finite elements. *IMA Journal of Numerical Analysis*, 28(1):1–24, January 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/1/1>; <http://imajna.oxfordjournals.org/cgi/reprint/28/1/1>.

**Schock:1985:ASC**

- [1420] Eberhard Schock. Arbitrarily slow convergence, uniform convergence and superconvergence of Galerkin-like methods. *IMA Journal of Numerical Analysis*, 5(2):153–160, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Schonfelder:1981:ECP**

- [1421] J. L. Schonfelder and M. Razaz. Error control with polynomial approximations. *IMA Journal of Numerical Analysis*, 1(1):105–114, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Schoombie:1982:SPG**

- [1422] S. W. Schoombie. Spline Petrov–Galerkin methods for the numerical solution of the Korteweg–de Vries equation. *IMA Journal of Numerical Analysis*, 2(1):95–109, January 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Schoombie:1991:SPS**

- [1423] S. W. Schoombie. Stability properties and spurious period two solutions in a numerical scheme for a reaction-diffusion equation with nonlinear diffusion. *IMA Journal of Numerical Analysis*, 11(4):553–578, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Schoombie:1981:EES**

- [1424] S. W. Schoombie and J. F. Botha. Error estimates for the solution of the radial Schrödinger equation by the Rayleigh–Ritz finite element method. *IMA Journal of Numerical Analysis*, 1(1):47–63, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Schotzau:2001:ECG**

- [1425] Dominik Schötzau and Christoph Schwab. Exponential convergence in a Galerkin least squares hp-FEM for Stokes flow. *IMA Journal of Numerical Analysis*, 21(1):

53–80, January 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/210053.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210053.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/pdf/210053.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210053.pdf).

**Schotzau:2004:MHD**

- [1426] Dominik Schötzau, Christoph Schwab, and Andrea Toselli. Mixed hp-DGFEM for incompressible flows II: Geometric edge meshes. *IMA Journal of Numerical Analysis*, 24(2):273–308, April 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_02/240273.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_02/240273.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_02/pdf/240273.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_02/pdf/240273.pdf).

**Schroll:1996:FDS**

- [1427] Hans Joachim Schroll and Ragnar Winther. Finite-difference schemes for scalar conservation laws with source terms. *IMA Journal of Numerical Analysis*, 16(2):201–215, April 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_16/Issue\\_02/160201.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_02/160201.sgm.abs.html).

**Schropp:2000:OSM**

- [1428] Johannes Schropp. One-step and multistep procedures for constrained minimization problems. *IMA Journal of Numerical Analysis*, 20(1):135–152, January 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/](http://www3.oup.co.uk/imanum/hdb/Volume_20/)



Issue\_01/200135.sgm.abs.html; [http://www3.oup.co.uk/imanum/hdb/Volume\\_16/Issue\\_01/pdf/200135.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_01/pdf/200135.pdf).

**Schropp:2008:PRK**

- [1429] Johannes Schropp. Projected Runge–Kutta methods for index 3 differential–algebraic equations near equilibria, periodic orbits and attracting sets. *IMA Journal of Numerical Analysis*, 28(2):274–291, April 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/2/274>; <http://imajna.oxfordjournals.org/cgi/reprint/28/2/274>.

**Schutz:2014:ACA**

- [1430] Jochen Schütz and Georg May. An adjoint consistency analysis for a class of hybrid mixed methods. *IMA Journal of Numerical Analysis*, 34(3):1222–1239, July 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/3/1222>.

**Scott:1988:EOC**

- [1431] Jennifer Scott and Sean McKee. On the exact order of convergence of discrete methods for Volterra-type equations. *IMA Journal of Numerical Analysis*, 8(4):511–515, October 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Selwood:1996:CRC**

- [1432] P. M. Selwood and A. J. Wathen. Convergence rates and classification for one-dimensional finite-element meshes.

*IMA Journal of Numerical Analysis*, 16(1):65–74, January 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_16/Issue\\_01/160065.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_01/160065.sgm.abs.html).

**Semper:1994:LFE**

- [1433] Bill Semper. Locking in finite-element approximations to long thin extensible beams. *IMA Journal of Numerical Analysis*, 14(1):97–109, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Seward:1984:SHO**

- [1434] W. L. Seward, G. Fairweather, and R. L. Johnston. A survey of higher-order methods for the numerical integration of semidiscrete parabolic problems. *IMA Journal of Numerical Analysis*, 4(4):375–425, October 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Shampine:1983:EEM**

- [1435] L. F. Shampine. Efficient extrapolation methods for ODEs. *IMA Journal of Numerical Analysis*, 3(4):383–395, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Shampine:1985:EEM**

- [1436] L. F. Shampine. Efficient extrapolation methods for ODEs. II. *IMA Journal of Numerical Analysis*, 5(1):23–28, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Shampine:1988:SVI**

- [1437] L. F. Shampine. Solving Volterra integral equations with ODE codes. *IMA Journal of Numerical Analysis*, 8(1):

37–41, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Sharon:2013:ASF**

- [1438] Nir Sharon and Uri Itai. Approximation schemes for functions of positive-definite matrix values. *IMA Journal of Numerical Analysis*, 33(4):1436–1468, October 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/4/1436.full.pdf+html>.

**Sharp:2004:CID**

- [1439] P. W. Sharp. Comparisons of integrators on a diverse collection of restricted three-body test problems. *IMA Journal of Numerical Analysis*, 24(4):557–575, October 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/24/4/557>; <http://imanum.oupjournals.org/cgi/reprint/24/4/557>.

**Sharp:1990:TST**

- [1440] P. W. Sharp, J. M. Fine, and K. Burrage. Two-stage and three-stage diagonally implicit Runge–Kutta Nyström methods of orders three and four. *IMA Journal of Numerical Analysis*, 10(4):489–504, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Shaw:2010:DEM**

- [1441] S. Shaw, M. K. Warby, and J. R. Whiteman. Discretization error and modelling error in the context

of the rapid inflation of hyperelastic membranes. *IMA Journal of Numerical Analysis*, 30(1):302–333, January 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/1/302>; <http://imajna.oxfordjournals.org/cgi/reprint/30/1/302>.

**Sheen:2003:PMT**

- [1442] Dongwoo Sheen, Ian H. Sloan, and Vidar Thomée. A parallel method for time discretization of parabolic equations based on Laplace transformation and quadrature. *IMA Journal of Numerical Analysis*, 23(2):269–299, April 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_02/230269.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_02/230269.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_02/pdf/230269.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_02/pdf/230269.pdf).

**Shen:1999:EBF**

- [1443] Wen Shen. Error bounds of finite difference schemes for multidimensional scalar conservation laws with source terms. *IMA Journal of Numerical Analysis*, 19(1):77–89, January 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_01/190077.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_01/190077.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_01/pdf/190077.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_01/pdf/190077.pdf).

**Shen:2006:TAS**

- [1444] Xunyang Shen and Peter R. Turner. Taylor approximation for symmetric

- level-index arithmetic processing. *IMA Journal of Numerical Analysis*, 26(3): 584–603, July 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://comjnl.oxfordjournals.org/cgi/content/abstract/26/3/584>; <http://comjnl.oxfordjournals.org/cgi/reprint/26/3/584>. **Sheng:1989:SLP**
- [1445] Q. Sheng. Solving linear partial differential equations by exponential splitting. *IMA Journal of Numerical Analysis*, 9(2):199–212, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). **Sheng:1994:GEE**
- [1446] Qin Sheng. Global error estimates for exponential splitting. *IMA Journal of Numerical Analysis*, 14(1):27–56, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). **Shih:2000:IMS**
- [1447] Yin-Tzer Shih and Howard C. Elman. Iterative methods for stabilized discrete convection-diffusion problems. *IMA Journal of Numerical Analysis*, 20(3):333–358, 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_03/200333.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_03/200333.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_03/pdf/200333.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_03/pdf/200333.pdf). **Shingel:2009:ISO**
- [1448] Tatiana Shingel. Interpolation in special orthogonal groups. *IMA Journal of Numerical Analysis*, 29(3):731–745, July 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/3/731>; <http://imajna.oxfordjournals.org/cgi/reprint/29/3/731>. **Sidi:2012:UFE**
- [1449] Avram Sidi. A user-friendly extrapolation method for computing infinite range integrals of products of oscillatory functions. *IMA Journal of Numerical Analysis*, 32(2):602–631, April 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/2/602.full.pdf+html>. **Sidi:1982:RAT**
- [1450] Avram Sidi and David Levin. Rational approximations from the  $d$ -transformation. *IMA Journal of Numerical Analysis*, 2(2):153–167, April 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). **Siebert:2011:CPA**
- [1451] Kunibert G. Siebert. A convergence proof for adaptive finite elements without lower bound. *IMA Journal of Numerical Analysis*, 31(3):947–970, July 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/3/947.full.pdf+html>. **Simoncini:2014:TNM**
- [1452] Valeria Simoncini, Daniel B. Szyld, and Marlliny Monsalve. On two numerical methods for the solution of large-scale algebraic Riccati equations. *IMA*

*Journal of Numerical Analysis*, 34(3): 904–920, July 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/3/904>.

**Simos:1991:SNF**

- [1453] T. E. Simos. Some new four-step exponential-fitting methods for the numerical solution of the radial Schrödinger equation. *IMA Journal of Numerical Analysis*, 11(3):347–356, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Simos:2001:FAO**

- [1454] T. E. Simos. A fourth algebraic order exponentially-fitted Runge–Kutta method for the numerical solution of the Schrödinger equation. *IMA Journal of Numerical Analysis*, 21(4): 919–931, October 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_04/210919.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_04/210919.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_04/pdf/210919.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_04/pdf/210919.pdf).

**Simpson:1994:TEA**

- [1455] R. B. Simpson. Testing for effects of asymmetry and instability on preconditioned iterations of conjugate gradient type. *IMA Journal of Numerical Analysis*, 14(1):1–25, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Singler:2011:CSA**

- [1456] John R. Singler. Convergent snapshot algorithms for infinite-dimensional Lyapunov equations. *IMA Journal of*

*Numerical Analysis*, 31(4):1468–1496, October 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/4/1468.full.pdf+html>.

**Sinha:2007:UFE**

- [1457] Rajen Kumar Sinha and Bhupen Deka. An unfitted finite-element method for elliptic and parabolic interface problems. *IMA Journal of Numerical Analysis*, 27(3):529–549, July 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/3/529>; <http://imajna.oxfordjournals.org/cgi/reprint/27/3/529>.

**Skrobanski:1990:BNM**

- [1458] J. J. Skrobański. Bounded-norm matrix-inverse mappings. *IMA Journal of Numerical Analysis*, 10(4):537–554, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Slevinsky:2018:UHA**

- [1459] Richard Mikaël Slevinsky. On the use of Hahn’s asymptotic formula and stabilized recurrence for a fast, simple and stable Chebyshev–Jacobi transform. *IMA Journal of Numerical Analysis*, 38(1):102–124, January 25, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/1/102/3038020>.

**Sloan:1981:SAC**

- [1460] D. M. Sloan. Stability and accuracy of a class of numerical bound-

ary conditions for the advection equation. *IMA Journal of Numerical Analysis*, 1(3):285–301, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Sloan:1986:PMI**

- [1461] I. H. Sloan and A. Spence. Projection methods for integral equations on the half-line. *IMA Journal of Numerical Analysis*, 6(2):153–172, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Sloan:1988:GMIA**

- [1462] I. H. Sloan and A. Spence. The Galerkin method for integral equations of the first kind with logarithmic kernel: applications. *IMA Journal of Numerical Analysis*, 8(1):123–140, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Sloan:1988:GMIB**

- [1463] I. H. Sloan and A. Spence. The Galerkin method for integral equations of the first kind with logarithmic kernel: theory. *IMA Journal of Numerical Analysis*, 8(1):105–122, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Sloan:1984:FVG**

- [1464] Ian H. Sloan. Four variants of the Galerkin method for integral equations of the second kind. *IMA Journal of Numerical Analysis*, 4(1):9–17, January 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Sloan:1993:FOC**

- [1465] Ian H. Sloan, Dat Tran, and Graeme Fairweather. A fourth-order cubic

spline method for linear second-order two-point boundary value problems. *IMA Journal of Numerical Analysis*, 13(4):591–607, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Slodicka:2006:TDS**

- [1466] M. Slodicka. A time discretization scheme for a non-linear degenerate eddy current model for ferromagnetic materials. *IMA Journal of Numerical Analysis*, 26(1):173–187, January 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/26/1/173>; <http://imanum.oxfordjournals.org/cgi/reprint/26/1/173>.

**Small:1988:CDN**

- [1467] R. D. Small and R. J. Charron. Continuous and discrete nonlinear approximations based on Fourier series. *IMA Journal of Numerical Analysis*, 8(3):281–293, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Smarzewski:1983:UCC**

- [1468] R. Smarzewski and A. Bujalska. Uniform convergence of cubic and quadratic  $X$ -spline interpolants. *IMA Journal of Numerical Analysis*, 3(3):353–372, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Smears:2017:REP**

- [1469] Iain Smears. Robust and efficient preconditioners for the discontinuous Galerkin time-stepping method. *IMA*

*Journal of Numerical Analysis*, 37(4): 1961–1985, October 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/4/1961/2433377>.

**Smith:1997:IAT**

- [1470] Antony Smith and David Silvester. Implicit algorithms and their linearization for the transient incompressible Navier–Stokes equations. *IMA Journal of Numerical Analysis*, 17(4):527–545, October 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_17/Issue\\_04/170527.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_04/170527.sgm.abs.html).

**Smitheman:2010:SCM**

- [1471] S. A. Smitheman, E. A. Spence, and A. S. Fokas. A spectral collocation method for the Laplace and modified Helmholtz equations in a convex polygon. *IMA Journal of Numerical Analysis*, 30(4):1184–1205, October 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/30/4/1184.full.pdf+html>.

**Soler:1990:VFM**

- [1472] Juan Soler. Vortex filament method. *IMA Journal of Numerical Analysis*, 10(1):75–102, January 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Sonar:1996:ORU**

- [1473] Thomas Sonar. Optimal recovery using thin plate splines in finite volume methods for the numerical solution of

hyperbolic conservation laws. *IMA Journal of Numerical Analysis*, 16(4): 549–581, October 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_16/Issue\\_04/160549.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_04/160549.sgm.abs.html).

**Sorokina:2014:RSC**

- [1474] T. Sorokina. Redundancy of smoothness conditions and supersmoothness of bivariate splines. *IMA Journal of Numerical Analysis*, 34(4):1701–1714, October 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/4/1701>.

**Sorokina:2007:LQI**

- [1475] Tatyana Sorokina and Frank Zeilfelder. Local quasi-interpolation by cubic  $C^1$  splines on type-6 tetrahedral partitions. *IMA Journal of Numerical Analysis*, 27(1):74–101, January 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/1/74>; <http://imajna.oxfordjournals.org/cgi/reprint/27/1/74>.

**Speleers:2008:MMP**

- [1476] Hendrik Speleers, Paul Dierckx, and Stefan Vandewalle. Multigrid methods with Powell–Sabin splines. *IMA Journal of Numerical Analysis*, 28(4):888–908, October 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/4/888>.

**Spence:1983:SPG**

- [1477] A. Spence and K. S. Thomas. On superconvergence properties of Galerkin's method for compact operator equations. *IMA Journal of Numerical Analysis*, 3(3):253–271, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Spence:1982:NTP**

- [1478] A. Spence and B. Werner. Nonsimple turning points and cusps. *IMA Journal of Numerical Analysis*, 2(4):413–427, October 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Srivastav:1983:NSSb**

- [1479] R. P. Srivastav. Numerical solution of singular integral equations using Gauss-type formulae. I. Quadrature and collocation on Chebyshev nodes. *IMA Journal of Numerical Analysis*, 3(3):305–318, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Srivastav:1983:NSSa**

- [1480] R. P. Srivastav and Erica Jen. Numerical solution of singular integral equations using Gauss-type formulae. II. Lobatto-Chebyshev quadrature and collocation on Chebyshev nodes. *IMA Journal of Numerical Analysis*, 3(3):319–325, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Stein:1997:BHF**

- [1481] O. Stein. Bifurcations of hyperbolic fixed points for explicit Runge–Kutta methods. *IMA Journal of*

*Numerical Analysis*, 17(2):151–175, April 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_17/Issue\\_02/170151.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_02/170151.sgm.abs.html). See erratum [1482].

**Stein:1998:EBH**

- [1482] O. Stein. Erratum: “Bifurcations of hyperbolic fixed points for explicit Runge–Kutta methods” [*IMA J. Numer. Anal.* **17** (1997), no. 2, 151–175; MR 98d:65103]. *IMA Journal of Numerical Analysis*, 18(2):329, April 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_02/180329.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_02/180329.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_02/pdf/180329.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_02/pdf/180329.pdf). See [1481].

**Steinbach:2016:TFP**

- [1483] Olaf Steinbach, Barbara Wohlmuth, and Linus Wunderlich. Trace and flux a priori error estimates in finite-element approximations of Signornitype problems. *IMA Journal of Numerical Analysis*, 36(3):1072–1095, July 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/3/1072>.

**Stephan:2000:DDA**

- [1484] Ernst P. Stephan and Thanh Tran. Domain decomposition algorithms for indefinite weakly singular integral equations: the  $h$  and  $p$  versions. *IMA Journal of Numerical Analysis*, 20(1):

- 1–24, January 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_01/200001.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_01/200001.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_01/pdf/200001.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_01/pdf/200001.pdf).
- Stevenson:2008:CDO**
- [1485] Rob Stevenson and Manuel Werner. Computation of differential operators in aggregated wavelet frame coordinates. *IMA Journal of Numerical Analysis*, 28(2):354–381, April 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/2/354>; <http://imajna.oxfordjournals.org/cgi/reprint/28/2/354>.
- Stevenson:2014:FOS**
- [1486] Rob P. Stevenson. First-order system least squares with inhomogeneous boundary conditions. *IMA Journal of Numerical Analysis*, 34(3):863–878, July 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/3/863>.
- Stewart:1997:PCF**
- [1487] G. W. Stewart. On the perturbation of  $LU$  and Cholesky factors. *IMA Journal of Numerical Analysis*, 17(1):1–6, January 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_17/Issue\\_01/170001.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_01/170001.sgm.abs.html).
- Stewart:1997:TMG**
- [1488] G. W. Stewart. The triangular matrices of Gaussian elimination and related decompositions. *IMA Journal of Numerical Analysis*, 17(1):7–16, January 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_17/Issue\\_01/170007.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_01/170007.sgm.abs.html).
- Stoll:2014:OSS**
- [1489] Martin Stoll. One-shot solution of a time-dependent time-periodic PDE-constrained optimization problem. *IMA Journal of Numerical Analysis*, 34(4):1554–1577, October 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/4/1554>.
- Strauss:2011:QPM**
- [1490] Michael Strauss. Quadratic projection methods for approximating the spectrum of self-adjoint operators. *IMA Journal of Numerical Analysis*, 31(1):40–60, January 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/1/40.full.pdf+html>.
- Streit:1989:EET**
- [1491] Uwe Streit. An efficient enthalpy-type method for the Stefan problem. *IMA Journal of Numerical Analysis*, 9(3):353–372, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).



**Stuart:1989:LII**

- [1492] Andrew Stuart. Linear instability implies spurious periodic solutions. *IMA Journal of Numerical Analysis*, 9(4): 465–486, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Styles:2001:EEF**

- [1493] Vanessa Styles. Error estimates for a finite-difference approximation of a mean field model of superconducting vortices in one-dimension. *IMA Journal of Numerical Analysis*, 21(3): 667–701, July 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_03/210667.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_03/210667.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_03/pdf/210667.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_03/pdf/210667.pdf).

**Stynes:2015:FDM**

- [1494] Martin Stynes and José Luis Gracia. A finite difference method for a two-point boundary value problem with a Caputo fractional derivative. *IMA Journal of Numerical Analysis*, 35(2):698–721, April 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/2/698>.

**Stynes:2001:SDM**

- [1495] Martin Stynes and Lutz Tobiska. The streamline-diffusion method for non-conforming Q elements on rectangular tensor-product meshes. *IMA Journal of Numerical Analysis*, 21(1): 123–142, January 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/210123.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210123.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/pdf/210123.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210123.pdf).

[http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/210123.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210123.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/pdf/210123.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210123.pdf).

**Su:2018:EEF**

- [1496] Chunmei Su and Wenfan Yi. Error estimates of a finite difference method for the Klein–Gordon–Zakharov system in the subsonic limit regime. *IMA Journal of Numerical Analysis*, 38(4): 2055–2073, October 16, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/4/2055/4082920>.

**Sun:1995:FEMb**

- [1497] Guang Fu Sun and Martin Stynes. Finite-element methods for singularly perturbed high-order elliptic two-point boundary value problems. I. Reaction-diffusion-type problems. *IMA Journal of Numerical Analysis*, 15(1):117–139, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Sun:1995:FEMa**

- [1498] Guang Fu Sun and Martin Stynes. Finite-element methods for singularly perturbed high-order elliptic two-point boundary value problems. II. Convection-diffusion-type problems. *IMA Journal of Numerical Analysis*, 15(2):197–219, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Sun:1996:OBP**

- [1499] Ji-Guang Sun. Optimal backward perturbation bounds for the linear least-squares problem with multiple right-hand sides. *IMA Jour-*

- nal of Numerical Analysis*, 16(1): 1–11, January 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_16/Issue\\_01/160001.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_01/160001.sgm.abs.html).
- Szyld:2014:SPI**
- [1500] Weiwei Sun and Jiming Wu. Interpolatory quadrature rules for Hadamard finite-part integrals and their superconvergence. *IMA Journal of Numerical Analysis*, 28(3):580–597, July 2008. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/28/3/580>; <http://imajna.oxfordjournals.org/cgi/reprint/28/3/580>.
- Sun:2008:IQR**
- [1501] Xiaodi Sun. Numerical analysis of an exponentially ill-conditioned boundary value problem with applications to metastable problems. *IMA Journal of Numerical Analysis*, 21(4):817–842, October 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_04/210817.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_04/210817.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_04/pdf/210817.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_04/pdf/210817.pdf).
- Sun:2001:NAE**
- [1502] K. Surla and Z. Uzelac. Some uniformly convergent spline difference schemes for singularly perturbed boundary value problems. *IMA Journal of Numerical Analysis*, 10(2):209–222, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Surla:1990:SUC**
- [1503] Daniel B. Szyld and Fei Xue. Several properties of invariant pairs of nonlinear algebraic eigenvalue problems. *IMA Journal of Numerical Analysis*, 34(3):921–954, July 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/3/921>.
- Tadmor:2005:AFP**
- [1504] Eitan Tadmor and Jared Tanner. Adaptive filters for piecewise smooth spectral data. *IMA Journal of Numerical Analysis*, 25(4):635–647, October 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/reprint/25/4/635>.
- Tan:1987:CDE**
- [1505] Roger C. E. Tan. Computing derivatives of eigensystems by the vector  $\epsilon$ -algorithm. *IMA Journal of Numerical Analysis*, 7(4):485–494, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Tan:1989:CDE**
- [1506] Roger C. E. Tan and Alan L. Andrew. Computing derivatives of eigenvalues and eigenvectors by simultaneous iteration. *IMA Journal of Numerical Analysis*, 9(1):111–122, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Tanaka:2016:FAN**
- [1507] Ken'ichiro Tanaka. A fast and accurate numerical method for symmetric Lévy processes based on the

Fourier transform and sinc-Gauss sampling formula. *IMA Journal of Numerical Analysis*, 36(3):1362–1388, July 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/3/1362>.

**Tanaka:2017:PTA**

- [1508] Ken'ichiro Tanaka, Tomoaki Okayama, and Masaaki Sugihara. Potential theoretic approach to design of accurate formulas for function approximation in symmetric weighted Hardy spaces. *IMA Journal of Numerical Analysis*, 37(2):861–904, April 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/2/861/2669979/Potential-theoretic-approach-to-design-of-accurate>.

**Tang:1993:NCM**

- [1509] Tao Tang. A note on collocation methods for Volterra integro-differential equations with weakly singular kernels. *IMA Journal of Numerical Analysis*, 13(1):93–99, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Tao:2016:VLI**

- [1510] Molei Tao and Houman Owhadi. Variational and linearly implicit integrators, with applications. *IMA Journal of Numerical Analysis*, 36(1):80–107, January 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/1/80>.

**Tarvainen:1999:TLS**

- [1511] Pasi Tarvainen. Two-level Schwarz method for unilateral variational inequalities. *IMA Journal of Numerical Analysis*, 19(2):273–290, April 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_02/190273.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_02/190273.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_02/pdf/190273.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_02/pdf/190273.pdf).

**Taylor:2010:LCL**

- [1512] Rodney Taylor and Vilmos Totik. Lebesgue constants for Leja points. *IMA Journal of Numerical Analysis*, 30(2):462–486, April 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/2/462>; <http://imajna.oxfordjournals.org/cgi/reprint/30/2/462>.

**teRiele:1982:CMW**

- [1513] Herman J. J. te Riele. Collocation methods for weakly singular second-kind Volterra integral equations with nonsmooth solution. *IMA Journal of Numerical Analysis*, 2(4):437–449, October 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Thatcher:1982:CSD**

- [1514] R. W. Thatcher and S. L. Askew. A complementary solution to the dam problem. *IMA Journal of Numerical Analysis*, 2(2):229–239, April 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Editors:2001:E**

- [1515] The Editors. Editorial. *IMA Journal of Numerical Analysis*, 21(1):0, January 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/210000.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210000.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/pdf/210000.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210000.pdf).

**Ting:1981:CPB**

- [1516] B. Y. Ting and Y. L. Luke. Conversion of polynomials between different polynomial bases. *IMA Journal of Numerical Analysis*, 1(2):229–234, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Titarev:2007:AAA**

- [1517] V. A. Titarev and E. F. Toro. Analysis of ADER and ADER-WAF schemes. *IMA Journal of Numerical Analysis*, 27(3):616–630, July 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/3/616>; <http://imajna.oxfordjournals.org/cgi/reprint/27/3/616>.

**Titley-Peloquin:2014:GCB**

- [1518] David Titley-Peloquin, Jennifer Pestana, and Andrew J. Wathen. GMRES convergence bounds that depend on the right-hand-side vector. *IMA Journal of Numerical Analysis*, 34(2):462–479, April 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/2/462.full.pdf+html>.

**Tobiska:2015:RPE**

- [1519] L. Tobiska and R. Verfürth. Robust a posteriori error estimates for stabilized finite element methods. *IMA Journal of Numerical Analysis*, 35(4):1652–1671, October 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/4/1652>.

**Todd:1989:CPA**

- [1520] Michael J. Todd. On convergence properties of algorithms for unconstrained minimization. *IMA Journal of Numerical Analysis*, 9(3):435–441, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Todor:2009:NAE**

- [1521] Radu-Alexandru Todor. A new approach to energy-based sparse finite-element spaces. *IMA Journal of Numerical Analysis*, 29(1):72–85, January 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Todor:2007:CRS**

- [1522] Radu Alexandru Todor and Christoph Schwab. Convergence rates for sparse chaos approximations of elliptic problems with stochastic coefficients. *IMA Journal of Numerical Analysis*, 27(2):232–261, April 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/2/232>; <http://imajna.oxfordjournals.org/cgi/reprint/27/2/232>.

**Toint:1988:GCC**

- [1523] Ph. L. Toint. Global convergence of a class of trust-region methods for nonconvex minimization in Hilbert space. *IMA Journal of Numerical Analysis*, 8(2):231–252, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Torelli:1993:SCQ**

- [1524] L. Torelli and R. Vermiglio. On the stability of continuous quadrature rules for differential equations with several constant delays. *IMA Journal of Numerical Analysis*, 13(2):291–302, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Toro:1997:URP**

- [1525] E. F. Toro and S. J. Billett. A unified Riemann-problem-based extension of the Warming-Beam and Lax-Wendroff schemes. *IMA Journal of Numerical Analysis*, 17(1):61–102, January 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_17/Issue\\_01/170061.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_01/170061.sgm.abs.html).

**Toro:2000:CTS**

- [1526] E. F. Toro and S. J. Billett. Centred TVD schemes for hyperbolic conservation laws. *IMA Journal of Numerical Analysis*, 20(1):47–79, January 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_01/200047.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_01/200047.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_01/pdf/200047.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_01/pdf/200047.pdf).

**Torrilhon:2006:SCK**

- [1527] Manuel Torrilhon and Kun Xu. Stability and consistency of kinetic unwinding for advection–diffusion equations. *IMA Journal of Numerical Analysis*, 26(4):686–722, October 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/26/4/686>; <http://imajna.oxfordjournals.org/cgi/reprint/26/4/686>.

**Toselli:2006:DPF**

- [1528] Andrea Toselli. Dual-primal FETI algorithms for edge finite-element approximations in 3D. *IMA Journal of Numerical Analysis*, 26(1):96–130, January 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/26/1/96>; <http://imanum.oxfordjournals.org/cgi/reprint/26/1/96>.

**Toselli:2004:DDP**

- [1529] Journal Andrea Toselli and Xavier Vasseur. Domain decomposition preconditioners of Neumann–Neumann type for hp-approximations on boundary layer meshes in three dimensions. *IMA Journal of Numerical Analysis*, 24(1):123–156, January 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_01/240123.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_01/240123.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_01/pdf/240123.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_01/pdf/240123.pdf).

**Tourigny:1990:PAN**

- [1530] Yves Tourigny. Product approximation for nonlinear Klein–Gordon equations. *IMA Journal of Numerical Analysis*, 10(3):449–462, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Tourigny:1991:OET**

- [1531] Yves Tourigny. Optimal  $H^1$  estimates for two time-discrete Galerkin approximations of a nonlinear Schrödinger equation. *IMA Journal of Numerical Analysis*, 11(4):509–523, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Townsend:2016:FCG**

- [1532] Alex Townsend, Thomas Trogdon, and Sheehan Olver. Fast computation of Gauss quadrature nodes and weights on the whole real line. *IMA Journal of Numerical Analysis*, 36(1):337–358, January 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/1/337>.

**Trefethen:2010:HTQ**

- [1533] Lloyd N. Trefethen. Householder triangularization of a quasimatrix. *IMA Journal of Numerical Analysis*, 30(4):887–897, October 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/30/4/887.full.pdf+html>.

**Trogdon:2016:RHA**

- [1534] Thomas Trogdon and Sheehan Olver. A Riemann–Hilbert approach to Ja-

cobi operators and Gaussian quadrature. *IMA Journal of Numerical Analysis*, 36(1):174–196, January 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/1/174>.

**Tsao:1993:NCD**

- [1535] Nai Kuan Tsao and Tse-Chien Sun. On the numerical computation of the derivatives of a B-spline series. *IMA Journal of Numerical Analysis*, 13(3):343–364, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Tuomela:2006:NSI**

- [1536] Jukka Tuomela, Teijo Arponen, and Villem Samuli Normi. On the numerical solution of involutive ordinary differential systems: enhanced linear algebra. *IMA Journal of Numerical Analysis*, 26(4):811–846, October 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/26/4/811>; <http://imajna.oxfordjournals.org/cgi/reprint/26/4/811>.

**Tupper:2005:TPM**

- [1537] P. F. Tupper. A test problem for molecular dynamics integrators. *IMA Journal of Numerical Analysis*, 25(2):286–309, April 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/25/2/286>; <http://imanum.oupjournals.org/cgi/reprint/25/2/286>.

**Turner:1982:DLS**

- [1538] Peter R. Turner. The distribution of leading significant digits. *IMA Journal of Numerical Analysis*, 2(4): 407–412, October 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Turner:1984:FRD**

- [1539] Peter R. Turner. Further revelations on l.s.d. *IMA Journal of Numerical Analysis*, 4(2):225–231, April 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Valvi:1987:AID**

- [1540] F. N. Valvi and V. S. Geroyannis. Analytic inverses and determinants for a class of matrices. *IMA Journal of Numerical Analysis*, 7(1):123–128, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**VanBeeumen:2015:LLH**

- [1541] Roel Van Beeumen, Wim Michiels, and Karl Meerbergen. Linearization of Lagrange and Hermite interpolating matrix polynomials. *IMA Journal of Numerical Analysis*, 35(2):909–930, April 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/2/909>.

**VanDenHeuvel:2001:URC**

- [1542] E. G. Van Den Heuvel. Using solvent conditions to obtain new stability results for  $\theta$ -methods for delay differential equations. *IMA Journal of Numerical Analysis*, 21(1):421–438, January 2001. CODEN IJ-

NADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/210421abs.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210421abs.pdf); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/pdf/210421.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210421.pdf).

**vanderHouwen:1982:SCM**

- [1543] P. J. van der Houwen and B. P. Sommeijer. A special class of multi-step Runge–Kutta methods with extended real stability interval. *IMA Journal of Numerical Analysis*, 2(2): 183–209, April 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**vanderHouwen:1983:PCM**

- [1544] P. J. van der Houwen and B. P. Sommeijer. Predictor-corrector methods with improved absolute stability regions. *IMA Journal of Numerical Analysis*, 3(4):417–437, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**vanderHouwen:1984:LMM**

- [1545] P. J. van der Houwen and B. P. Sommeijer. Linear multistep methods with reduced truncation error for periodic initial value problems. *IMA Journal of Numerical Analysis*, 4(4): 479–489, October 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**vanderHouwen:1987:PCM**

- [1546] P. J. van der Houwen and B. P. Sommeijer. Predictor-corrector methods for periodic second-order initial-value problems. *IMA Journal of Numerical Analysis*, 7(4):407–422, 1987. CODEN

IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**vanderHouwen:1990:ISP**

- [1547] P. J. van der Houwen and B. P. Sommeijer. Improving the stability of predictor-corrector methods by residue smoothing. *IMA Journal of Numerical Analysis*, 10(3):361–378, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**vanderHouwen:1986:SPC**

- [1548] P. J. van der Houwen, B. P. Sommeijer, and Christopher T. H. Baker. On the stability of predictor-corrector methods for parabolic equations with delay. *IMA Journal of Numerical Analysis*, 6(1):1–23, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**vanderHouwen:1981:CSA**

- [1549] P. J. van der Houwen, P. H. M. Wolkenfelt, and C. T. H. Baker. Convergence and stability analysis for modified Runge–Kutta methods in the numerical treatment of second-kind Volterra integral equations. *IMA Journal of Numerical Analysis*, 1(3):303–328, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**VanDeun:2006:QFB**

- [1550] J. Van Deun and A. Bultheel. A quadrature formula based on Chebyshev rational functions. *IMA Journal of Numerical Analysis*, 26(4):641–656, October 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/26/4/641>; <http://imajna.oxfordjournals.org/cgi/reprint/26/4/641>.

[oxfordjournals.org/cgi/reprint/26/4/641](http://imajna.oxfordjournals.org/cgi/reprint/26/4/641).

**vanDorsseleer:1994:ECS**

- [1551] J. L. M. van Dorsseleer and M. N. Spijker. The error committed by stopping the Newton iteration in the numerical solution of stiff initial value problems. *IMA Journal of Numerical Analysis*, 14(2):183–209, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**vanDorsseleer:1999:IMP**

- [1552] Jos L. M. van Dorsseleer and Christian Lubich. Inertial manifolds of parabolic differential equations under higher-order discretizations. *IMA Journal of Numerical Analysis*, 19(3):455–471, July 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_03/190455.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_03/190455.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_03/pdf/190455.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_03/pdf/190455.pdf).

**Vandereycken:2013:RGC**

- [1553] Bart Vandereycken, P.-A. Absil, and Stefan Vandewalle. A Riemannian geometry with complete geodesics for the set of positive semidefinite matrices of fixed rank. *IMA Journal of Numerical Analysis*, 33(2):481–514, April 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/2/481.full.pdf+html>.

**Vannieuwenhoven:2015:RAT**

- [1554] Nick Vannieuwenhoven, Raf Vandebril, and Karl Meerbergen. A ran-



domized algorithm for testing nonsingularity of structured matrices with an application to asserting nondefectivity of Segrè varieties. *IMA Journal of Numerical Analysis*, 35(1):289–324, January 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/1/289>.

**Varah:1993:EPV**

- [1555] J. M. Varah. Errors and perturbations in Vandermonde systems. *IMA Journal of Numerical Analysis*, 13(1):1–12, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Vasconcelos:1998:PIM**

- [1556] Paulo B. Vasconcelos and Filomena D. d’Almeida. Preconditioned iterative methods for coupled discretizations of fluid flow problems. *IMA Journal of Numerical Analysis*, 18(3):385–397, July 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_03/180385.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_03/180385.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_03/pdf/180385.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_03/pdf/180385.pdf).

**Veese:2012:PCF**

- [1557] Andreas Veese and Rüdiger Verfürth. Poincaré constants for finite element stars. *IMA Journal of Numerical Analysis*, 32(1):30–47, January 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/1/30.full.pdf+html>.

**Vejchodsky:2006:GLC**

- [1558] Tomás Vejchodsky. Guaranteed and locally computable a posteriori error estimate. *IMA Journal of Numerical Analysis*, 26(3):525–540, July 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://comjnl.oxfordjournals.org/cgi/content/abstract/26/3/525>; <http://comjnl.oxfordjournals.org/cgi/reprint/26/3/525>.

**Verdi:1985:NAH**

- [1559] C. Verdi and A. Visintin. Numerical approximation of hysteresis problems. *IMA Journal of Numerical Analysis*, 5(4):447–463, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Verfürth:1984:CCG**

- [1560] R. Verfürth. A combined conjugate gradient-multigrid algorithm for the numerical solution of the Stokes problem. *IMA Journal of Numerical Analysis*, 4(4):441–455, October 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Vigo-Aguiar:2007:FSR**

- [1561] Jesús Vigo-Aguiar and Higinio Ramos. A family of  $A$ -stable Runge–Kutta collocation methods of higher order for initial-value problems. *IMA Journal of Numerical Analysis*, 27(4):798–817, October 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/4/798>; <http://imajna.oxfordjournals.org/cgi/reprint/27/4/798>.

**Viscor:2013:RFD**

- [1562] Martin Viscor and Martin Stynes. A robust finite difference method for a singularly perturbed degenerate parabolic problem II. *IMA Journal of Numerical Analysis*, 33(2):460–480, April 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/2/460.full.pdf+html>.

**Viswanath:2001:GEN**

- [1563] Divakar Viswanath. Global errors of numerical ODE solvers and Lyapunov's theory of stability. *IMA Journal of Numerical Analysis*, 21(1):387–406, January 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/210387abs.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210387abs.pdf); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/pdf/210387.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210387.pdf).

**Voller:1985:IFD**

- [1564] V. R. Voller. Implicit finite-difference solutions of the enthalpy formulation of Stefan problems. *IMA Journal of Numerical Analysis*, 5(2):201–214, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Vulanovic:2001:PMS**

- [1565] Relja Vulanović. A priori meshes for singularly perturbed quasilinear two-point boundary value problems. *IMA Journal of Numerical Analysis*, 21(1):349–366, January 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/](http://www3.oup.co.uk/imanum/hdb/Volume_21/)

[http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/pdf/210349.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210349.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/pdf/210349.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210349.pdf).

**Walz:1989:EBS**

- [1566] Guido Walz. Error bounds and stopping rules for extrapolation methods. *IMA Journal of Numerical Analysis*, 9(2):185–198, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Wang:2011:DGM**

- [1567] Fei Wang, Weimin Han, and Xiaoliang Cheng. Discontinuous Galerkin methods for solving the Signorini problem. *IMA Journal of Numerical Analysis*, 31(4):1754–1772, October 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/4/1754.full.pdf+html>.

**Wang:2017:FAC**

- [1568] Haiyong Wang and Daan Huybrechs. Fast and accurate computation of Chebyshev coefficients in the complex plane. *IMA Journal of Numerical Analysis*, 37(3):1150–1174, July 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/3/1150/2670030/Fast-and-accurate-computation-of-Chebyshev>.

**Wang:2011:AEF**

- [1569] Haiyong Wang and Shuhuang Xiang. Asymptotic expansion and Filon-type methods for a Volterra integral equation with a highly oscillatory kernel. *IMA Journal of Numerical Analysis*, 31(2):469–490,

April 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/2/469.full.pdf+html>.

**Wang:1995:ELL**

- [1570] Hong Wang, Richard E. Ewing, and Thomas F. Russell. Eulerian–Lagrangian localized adjoint methods for convection-diffusion equations and their convergence analysis. *IMA Journal of Numerical Analysis*, 15(3):405–459, 1995. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Wang:2011:KTN**

- [1571] Jin-Hua Wang and Chong Li. Kantorovich’s theorems for Newton’s method for mappings and optimization problems on Lie groups. *IMA Journal of Numerical Analysis*, 31(1):322–347, January 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/1/322.full.pdf+html>.

**Wang:2011:UEF**

- [1572] Kaixin Wang and Hong Wang. Uniform estimates for a family of Eulerian–Lagrangian methods for time-dependent convection–diffusion equations with degenerate diffusion. *IMA Journal of Numerical Analysis*, 31(3):1006–1037, July 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/3/1006.full.pdf+html>.

**Wang:1998:CEB**

- [1573] S. Wang, I. H. Sloan, and D. W. Kelly. Computable error bounds for pointwise derivatives of a Neumann problem. *IMA Journal of Numerical Analysis*, 18(2):251–271, April 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_02/180251.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_02/180251.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_18/Issue\\_02/pdf/180251.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_18/Issue_02/pdf/180251.pdf).

**Wang:2004:NFF**

- [1574] Song Wang. A novel fitted finite volume method for the Black–Scholes equation governing option pricing. *IMA Journal of Numerical Analysis*, 24(4):699–720, October 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/24/4/699>; <http://imanum.oupjournals.org/cgi/reprint/24/4/699>.

**Wang:2017:SCR**

- [1575] Xiaojie Wang. Strong convergence rates of the linear implicit Euler method for the finite element discretization of SPDEs with additive noise. *IMA Journal of Numerical Analysis*, 37(2):965–984, April 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/2/965/2669957/Strong-convergence-rates-of-the-linear-implicit>.

**Wang:2007:BBP**

- [1576] Xiaoqun Wang and Ian H. Sloan. Brownian bridge and principal compo-

nent analysis: towards removing the curse of dimensionality. *IMA Journal of Numerical Analysis*, 27(4):631–654, October 2007. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/27/4/631>; <http://imajna.oxfordjournals.org/cgi/reprint/27/4/631>.

**Wang:2000:CNM**

- [1577] Xinghua Wang. Convergence of Newton’s method and uniqueness of the solution of equations in Banach space. *IMA Journal of Numerical Analysis*, 20(1):123–134, January 2000. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_01/200123.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_01/200123.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_20/Issue\\_01/pdf/200123.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_20/Issue_01/pdf/200123.pdf).

**Wang:1996:CPA**

- [1578] Xinmin Wang. Convergence of parallel AOR and GAOR methods applied to  $H$ -matrices. *IMA Journal of Numerical Analysis*, 16(4):485–499, October 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_16/Issue\\_04/160485.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_04/160485.sgm.abs.html).

**Wang:2018:EIB**

- [1579] Zhengyu Wang and Xiaojun Chen. An exponential integrator-based discontinuous Galerkin method for linear complementarity systems. *IMA Journal of Numerical Analysis*, 38(4):2145–2165, October 16, 2018. CODEN

IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/4/2145/4554435>.

**Wang:2011:CEB**

- [1580] Zhengyu Wang and Ya xiang Yuan. Componentwise error bounds for linear complementarity problems. *IMA Journal of Numerical Analysis*, 31(1):348–357, January 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/1/348.full.pdf+html>.

**Wang:2015:GLA**

- [1581] Zhong-Qing Wang and Xin-Min Xiang. Generalized Laguerre approximations and spectral method for the Camassa–Holm equation. *IMA Journal of Numerical Analysis*, 35(3):1456–1482, July 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/3/1456>.

**Wathen:1987:REB**

- [1582] A. J. Wathen. Realistic eigenvalue bounds for the Galerkin mass matrix. *IMA Journal of Numerical Analysis*, 7(4):449–457, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Wathen:1985:SMF**

- [1583] A. J. Wathen and M. J. Baines. On the structure of the moving finite-element equations. *IMA Journal of Numerical Analysis*, 5(2):161–182, 1985. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Watson:1981:ALA**

- [1584] G. A. Watson. An algorithm for linear  $L_1$  approximation of continuous functions. *IMA Journal of Numerical Analysis*, 1(2):157–167, 1981. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Watson:1982:NML**

- [1585] G. A. Watson. Numerical methods for linear orthogonal  $L_p$  approximation. *IMA Journal of Numerical Analysis*, 2(3):275–287, July 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Watson:1984:DAR**

- [1586] G. A. Watson. Discrete  $l_1$  approximation by rational functions. *IMA Journal of Numerical Analysis*, 4(3):275–288, July 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Watson:1988:MCS**

- [1587] G. A. Watson. A method for the Chebyshev solution of an overdetermined system of complex linear equations. *IMA Journal of Numerical Analysis*, 8(4):461–471, October 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Watson:1988:SPS**

- [1588] G. A. Watson. The smallest perturbation of a submatrix that lowers the rank of the matrix. *IMA Journal of Numerical Analysis*, 8(3):295–303, 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Watson:1990:CAD**

- [1589] G. A. Watson. Chebyshev approximation to data by positive sums of exponentials. *IMA Journal of Numerical Analysis*, 10(4):569–582, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Watson:1991:AOS**

- [1590] G. A. Watson. An algorithm for optimal  $l_2$  scaling of matrices. *IMA Journal of Numerical Analysis*, 11(4):481–492, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Watson:2002:GNM**

- [1591] G. A. Watson. On the Gauss–Newton method for  $l_1$  orthogonal distance regression. *IMA Journal of Numerical Analysis*, 22(3):345–357, July 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_03/220345.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_03/220345.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_03/pdf/220345.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_03/pdf/220345.pdf).

**Weber:2017:CRF**

- [1592] Franziska Weber. Convergence rates of finite difference schemes for the linear advection and wave equation with rough coefficient. *IMA Journal of Numerical Analysis*, 37(3):1586–1634, July 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/3/1586/2670057/Convergence-rates-of-finite-difference-schemes-for>

**Weideman:2010:ICI**

- [1593] J. A. C. Weideman. Improved contour integral methods for parabolic PDEs. *IMA Journal of Numerical Analysis*, 30(1):334–350, January 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/1/334>; <http://imajna.oxfordjournals.org/cgi/reprint/30/1/334>.

**Weiner:1993:PSR**

- [1594] R. Weiner, M. Arnold, P. Rentrop, and K. Strehmel. Partitioning strategies in Runge–Kutta type methods. *IMA Journal of Numerical Analysis*, 13(2):303–319, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Wendland:2001:LPR**

- [1595] Holger Wendland. Local polynomial reproduction and moving least squares approximation. *IMA Journal of Numerical Analysis*, 21(1):285–300, January 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/210285.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/210285.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_01/pdf/210285.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_01/pdf/210285.pdf).

**Wesseling:1996:NSC**

- [1596] P. Wesseling. von Neumann stability conditions for the convection-diffusion equation. *IMA Journal of Numerical Analysis*, 16(4):583–598, October 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642

(electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_16/Issue\\_04/160583.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_04/160583.sgm.abs.html).

**Wihler:2004:LFD**

- [1597] Journal Thomas P. Wihler. Locking-free DGFEM for elasticity problems in polygons. *IMA Journal of Numerical Analysis*, 24(1):45–75, January 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_01/240045.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_01/240045.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_01/pdf/240045.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_01/pdf/240045.pdf).

**Williams:1993:BCA**

- [1598] Jack Williams and Z. Kalogiratou. Best Chebyshev approximation from families of ordinary differential equations. *IMA Journal of Numerical Analysis*, 13(3):383–395, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Wolkenfelt:1982:CRQ**

- [1599] P. H. M. Wolkenfelt. The construction of reducible quadrature rules for Volterra integral and integro-differential equations. *IMA Journal of Numerical Analysis*, 2(2):131–152, April 1982. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Wright:1984:APC**

- [1600] K. Wright. Asymptotic properties of collocation matrix norms. 1. Global polynomial approximation. *IMA Journal of Numerical Analysis*, 4(2):185–202, April 1984. CODEN IJNADH.

ISSN 0272-4979 (print), 1464-3642 (electronic).

**Wright:1991:MSC**

- [1601] K. Wright, A. H.-A. Ahmed, and A. H. Seleman. Mesh selection in collocation for boundary value problems. *IMA Journal of Numerical Analysis*, 11(1):7–20, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Wright:1986:CPH**

- [1602] Stephen J. Wright. Convergence of projected Hessian approximations in quasi-Newton methods for the nonlinear programming problem. *IMA Journal of Numerical Analysis*, 6(4):463–474, 1986. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Wright:1990:CIA**

- [1603] Stephen J. Wright. Convergence of an inexact algorithm for composite nonsmooth optimization. *IMA Journal of Numerical Analysis*, 10(3):299–321, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Wright:2002:PRM**

- [1604] Thomas G. Wright and Lloyd N. Trefethen. Pseudospectra of rectangular matrices. *IMA Journal of Numerical Analysis*, 22(4):501–519, October 2002. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_04/220501.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_04/220501.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_22/Issue\\_04/pdf/220501.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_22/Issue_04/pdf/220501.pdf).

**Wu:2016:FMR**

- [1605] Bin Wu and Qinghui Zhang. Fast multiscale regularization methods for high-order numerical differentiation. *IMA Journal of Numerical Analysis*, 36(3):1432–1451, July 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/3/1432>.

**Wu:2018:NAA**

- [1606] Gang Wu and Lu Zhang. New algorithms for approximating  $\varphi$ -functions and their condition numbers for large sparse matrices. *IMA Journal of Numerical Analysis*, 38(3):1185–1208, July 17, 2018. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://academic.oup.com/imajna/article/38/3/1185/4082173>.

**Wu:2014:PAE**

- [1607] Haijun Wu. Pre-asymptotic error analysis of CIP-FEM and FEM for the Helmholtz equation with high wave number. Part I: linear version. *IMA Journal of Numerical Analysis*, 34(3):1266–1288, July 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/3/1266>.

**Wu:2009:EEA**

- [1608] Haijun Wu and Zhimin Zhang. Enhancing eigenvalue approximation by gradient recovery on adaptive meshes. *IMA Journal of Numerical Analysis*, 29(4):1008–1022, Oc-

- tober 2009. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/29/4/1008>; <http://imajna.oxfordjournals.org/cgi/reprint/29/4/1008>.
- Wu:2005:SRS**
- [1609] Jiming Wu and Yong Lü. A superconvergence result for the second-order Newton–Cotes formula for certain finite-part integrals. *IMA Journal of Numerical Analysis*, 25(2):253–263, April 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oupjournals.org/cgi/content/abstract/25/2/253>; <http://imanum.oupjournals.org/cgi/reprint/25/2/253>.
- Wu:2015:CAS**
- [1610] Shu-Lin Wu. Convergence analysis of some second-order parareal algorithms. *IMA Journal of Numerical Analysis*, 35(3):1315–1341, July 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/3/1315>.
- Wu:2012:CAO**
- [1611] Shu-Lin Wu, Cheng-Ming Huang, and Ting-Zhu Huang. Convergence analysis of the overlapping Schwarz waveform relaxation algorithm for reaction-diffusion equations with time delay. *IMA Journal of Numerical Analysis*, 32(2):632–671, April 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/2/632.full.pdf+html>.
- Wu:1994:SSH**
- [1612] W. Wu, A. Spence, and K. A. Cliffe. Steady-state/Hopf mode interaction at a symmetry-breaking Takens–Bogdanov point. *IMA Journal of Numerical Analysis*, 14(1):137–160, 1994. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Wu:2012:CAV**
- [1613] Yongke Wu, Long Chen, Xiaoping Xie, and Jinchao Xu. Convergence analysis of  $V$ -cycle multigrid methods for anisotropic elliptic equations. *IMA Journal of Numerical Analysis*, 32(4):1329–1347, October 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/4/1329.full.pdf+html>.
- Wu:1993:LEE**
- [1614] Zong Min Wu and Robert Schaback. Local error estimates for radial basis function interpolation of scattered data. *IMA Journal of Numerical Analysis*, 13(1):13–27, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- Wyns:2017:CAM**
- [1615] Maarten Wyns. Convergence analysis of the Modified Craig–Sneyd scheme for two-dimensional convection-diffusion equations with nonsmooth initial data. *IMA Journal of Numerical Analysis*, 37(2):798–831, April 2017. CODEN IJNADH. ISSN



0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/2/798/2669993/Convergence-analysis-of-the-Modified-Craig-Sneyd>.

**Xia:2015:HDF**

- [1616] Bingxing Xia and Viet Ha Hoang. High-dimensional finite element method for multiscale linear elasticity. *IMA Journal of Numerical Analysis*, 35(3):1277–1314, July 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/35/3/1277>.

**Xiang:2011:CCF**

- [1617] Shuhuang Xiang, Yeol Je Cho, Haiyong Wang, and Hermann Brunner. Clenshaw–Curtis–Filon-type methods for highly oscillatory Bessel transforms and applications. *IMA Journal of Numerical Analysis*, 31(4):1281–1314, October 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/4/1281.full.pdf+html>. See erratum [1618].

**Xiang:2013:ESC**

- [1618] Shuhuang Xiang, Yeol Je Cho, Haiyong Wang, and Hermann Brunner. Erratum to “Clenshaw–Curtis–Filon-type methods for highly oscillatory Bessel transforms and applications” (*IMA Journal of Numerical Analysis* (2011) **31**:1281–1314). *IMA Journal of Numerical Analysis*, 33(4):1480–1483, October 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/4/1480.full.pdf+html>. See [1617].

<http://imajna.oxfordjournals.org/content/33/4/1480.full.pdf+html>. See [1617].

**Xie:2010:SEP**

- [1619] Gang Xie and Thomas P.-Y. Yu. Smoothness equivalence properties of interpolatory Lie group subdivision schemes. *IMA Journal of Numerical Analysis*, 30(3):731–750, July 2010. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/30/3/731>; <http://imajna.oxfordjournals.org/cgi/reprint/30/3/731>.

**Xie:2012:AOE**

- [1620] Gang Xie and Thomas P.-Y. Yu. Approximation order equivalence properties of manifold-valued data subdivision schemes. *IMA Journal of Numerical Analysis*, 32(2):687–700, April 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/2/687.full.pdf+html>.

**Xie:2014:TMM**

- [1621] Hehu Xie. A type of multilevel method for the Steklov eigenvalue problem. *IMA Journal of Numerical Analysis*, 34(2):592–608, April 2014. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/34/2/592.full.pdf+html>.

**Xie:2005:ISE**

- [1622] Ziqing Xie, Chuanmiao Chen, and Yun Xu. An improved search-extension

- method for computing multiple solutions of semilinear PDEs. *IMA Journal of Numerical Analysis*, 25(3):549–576, July 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/25/3/549>; <http://imanum.oxfordjournals.org/cgi/reprint/25/3/549>.
- [1623] Da Xu. Uniform  $l_1$  behaviour in a second-order difference-type method for a linear Volterra equation with completely monotonic kernel I: stability. *IMA Journal of Numerical Analysis*, 31(3):1154–1180, July 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/3/1154.full.pdf+html>.
- [1624] Journal Xuejun Xu, S. H. Lui, and T. Rahman. A two-level additive Schwarz method for the Morley non-conforming element approximation of a nonlinear biharmonic equation. *IMA Journal of Numerical Analysis*, 24(1):97–122, January 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_01/240097.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_01/240097.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_01/pdf/240097.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_01/pdf/240097.pdf).
- [1625] Kuan Xu and Nicholas Hale. Explicit construction of rectangular differentiation matrices. *IMA Journal of Numerical Analysis*, 36(2):618–632, April 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/2/618>.
- [1626] X. Xu, W. Huang, R. D. Russell, and J. F. Williams. Convergence of de Boor’s algorithm for the generation of equidistributing meshes. *IMA Journal of Numerical Analysis*, 31(2):580–596, April 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/2/580.full.pdf+html>.
- [1627] Plamen Y. Yalamov and Marcin Paprzycki. Stability and performance analysis of a block elimination solver for bordered linear systems. *IMA Journal of Numerical Analysis*, 19(3):335–348, July 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_03/190335.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_03/190335.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_03/pdf/190335.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_03/pdf/190335.pdf).
- [1628] Yi Yan. Cosine change of variable for Symm’s integral equation on open arcs. *IMA Journal of Numerical Analysis*, 10(4):521–535, 1990. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- [1629] Yubin Yan. Smoothing properties and approximation of time deriva-

Xu:2011:CBA

Xu:2011:UBS

Yalamov:1999:SPA

Xu:2004:TLA

Yan:1990:CCV

Xu:2016:ECR

Yan:2003:SPA

- tives for parabolic equations: constant time steps. *IMA Journal of Numerical Analysis*, 23(3):465–487, July 2003. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_03/drg002.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_03/drg002.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_23/Issue\\_03/pdf/drg002.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_23/Issue_03/pdf/drg002.pdf).
- Yang:1996:PIN**
- [1630] Daoqi Yang. A parallel iterative nonoverlapping domain decomposition procedure for elliptic problems. *IMA Journal of Numerical Analysis*, 16(1):75–91, January 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_16/Issue\\_01/160075.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_01/160075.sgm.abs.html).
- Yang:1999:IPM**
- [1631] Daoqi Yang. An iterative perturbation method for saddle point problems. *IMA Journal of Numerical Analysis*, 19(2):215–231, April 1999. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_02/190215.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_02/190215.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_19/Issue\\_02/pdf/190215.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_19/Issue_02/pdf/190215.pdf).
- Yang:2011:QFV**
- [1632] Min Yang and Jianguo Liu. A quadratic finite volume element method for parabolic problems on quadrilateral meshes. *IMA Journal of Numerical Analysis*, 31(3):1038–1061, July 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/3/1038.full.pdf+html>.
- Yang:2013:QFV**
- [1633] Min Yang, Jianguo Liu, and Yanping Lin. Quadratic finite-volume methods for elliptic and parabolic problems on quadrilateral meshes: optimal-order errors based on Barlow points. *IMA Journal of Numerical Analysis*, 33(4):1342–1364, October 2013. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/33/4/1342.full.pdf+html>.
- Yang:2016:UAH**
- [1634] Min Yang, Jianguo Liu, and Qingsong Zou. Unified analysis of higher-order finite volume methods for parabolic problems on quadrilateral meshes. *IMA Journal of Numerical Analysis*, 36(2):872–896, April 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/36/2/872>.
- Yoshikawa:2017:EES**
- [1635] Shuji Yoshikawa. An error estimate for structure-preserving finite difference scheme for the Falk model system of shape memory alloys. *IMA Journal of Numerical Analysis*, 37(1):477–504, January 1, 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <https://academic.oup.com/imajna/article/37/1/477/2669932/An-error-estimate-for-structure-preserving-finite>.

**Ypma:1983:ERE**

- [1636] T. J. Ypma. The effect of rounding errors on Newtonlike methods. *IMA Journal of Numerical Analysis*, 3(1):109–118, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Yuan:1984:EOL**

- [1637] Y. Yuan. An example of only linear convergence of trust region algorithms for nonsmooth optimization. *IMA Journal of Numerical Analysis*, 4(3):327–335, July 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Yuan:1984:LOC**

- [1638] Y. Yuan. On the least  $Q$ -order of convergence of variable metric algorithms. *IMA Journal of Numerical Analysis*, 4(2):233–239, April 1984. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Yuan:1991:MBA**

- [1639] Ya Xiang Yuan. A modified BFGS algorithm for unconstrained optimization. *IMA Journal of Numerical Analysis*, 11(3):325–332, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Yun:2019:UCM**

- [1640] Xiaofan Yun, Chenxiang Qin, Jinbiao Wu, and Hui Zheng. Uniform convergence of a multigrid method for elliptic equations with anisotropic coefficients. *IMA Journal of Numerical Analysis*, 39(2):1058–1084, April 2019. CODEN IJNADH. ISSN 0272-4979 (print),

1464-3642 (electronic). URL <http://academic.oup.com/imagna/article/39/2/1058/4972989>.

**Zakerzadeh:2016:HOA**

- [1641] Hamed Zakerzadeh and Ulrik S. Fjordholm. High-order accurate, fully discrete entropy stable schemes for scalar conservation laws. *IMA Journal of Numerical Analysis*, 36(2):633–654, April 2016. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imagna.oxfordjournals.org/content/36/2/633>.

**Zanna:2015:EVP**

- [1642] Antonella Zanna. Explicit volume-preserving splitting methods for divergence-free ODEs by tensor-product basis decompositions. *IMA Journal of Numerical Analysis*, 35(1):89–106, January 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imagna.oxfordjournals.org/content/35/1/89>.

**Zhang:2004:SAR**

- [1643] Chengjian Zhang and Stefan Vandewalle. Stability analysis of Runge–Kutta methods for nonlinear Volterra delay-integro-differential equations. *IMA Journal of Numerical Analysis*, 24(2):193–214, April 2004. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_02/240193.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_02/240193.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_24/Issue\\_02/pdf/240193.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_24/Issue_02/pdf/240193.pdf).

**Zhang:2012:CAM**

- [1644] Lei-Hong Zhang and Moody T. Chu. Computing absolute maximum correlation. *IMA Journal of Numerical Analysis*, 32(1):163–184, January 2012. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/32/1/163.full.pdf+html>.

**Zhang:2006:DMP**

- [1645] Li Zhang, Weijun Zhou, and Dong-Hui Li. A descent modified Polak–Ribière–Polyak conjugate gradient method and its global convergence. *IMA Journal of Numerical Analysis*, 26(4):629–640, October 2006. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/cgi/content/abstract/26/4/629>; <http://imajna.oxfordjournals.org/cgi/reprint/26/4/629>.

**Zhang:1996:CVM**

- [1646] Pingwen Zhang. Convergence of vortex methods in a bounded domain using linear finite elements. *IMA Journal of Numerical Analysis*, 16(4):539–548, October 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_16/Issue\\_04/160539.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_16/Issue_04/160539.sgm.abs.html).

**Zhang:1987:LCU**

- [1647] Yin Zhang and R. P. Tewarson. Least-change updates to Cholesky factors subject to the nonlinear quasi-Newton condition. *IMA Journal of Numerical Analysis*, 7(4):509–521, 1987. CODEN

IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Zhang:1988:QNA**

- [1648] Yin Zhang and R. P. Tewarson. Quasi-Newton algorithms with updates from the preconvex part of Broyden’s family. *IMA Journal of Numerical Analysis*, 8(4):487–509, October 1988. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Zhang:2001:SDR**

- [1649] Zhimin Zhang, Ningning Yan, and Tong Sun. Superconvergent derivative recovery for the intermediate finite element family of the second type. *IMA Journal of Numerical Analysis*, 21(3):643–665, July 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_03/210643.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_03/210643.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_03/pdf/210643.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_03/pdf/210643.pdf).

**Zhao:1993:UTO**

- [1650] Ning Zhao and Jia Zun Dai. Uniformly third-order accurate TVNE interpolations. *IMA Journal of Numerical Analysis*, 13(2):255–261, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Zheng:2015:CAM**

- [1651] Hui Zheng and Jinbiao Wu. Convergence analysis on multigrid methods for elliptic problems with large jumps in coefficients. *IMA Journal of Numerical Analysis*, 35(4):1888–1912, October 2015. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642

(electronic). URL <http://imajna.oxfordjournals.org/content/35/4/1888>.

**Zhou:2005:CNS**

- [1652] Jiansong Zhou and Zhiping Li. Computing non-smooth minimizers with the mesh transformation method. *IMA Journal of Numerical Analysis*, 25(3):458–472, July 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imanum.oxfordjournals.org/cgi/content/abstract/25/3/458>; <http://imanum.oxfordjournals.org/cgi/reprint/25/3/458>.

**Zhu:2011:RPE**

- [1653] Liang Zhu and Dominik Schötzau. A robust a posteriori error estimate for hp-adaptive DG methods for convection–diffusion equations. *IMA Journal of Numerical Analysis*, 31(3):971–1005, July 2011. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL <http://imajna.oxfordjournals.org/content/31/3/971.full.pdf+html>.

**Zietak:1983:PMS**

- [1654] K. Ziętak. The properties of the minimax solution of a nonlinear matrix equation  $XY = A$ . *IMA Journal of Numerical Analysis*, 3(2):229–244, 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Zietak:1987:PSL**

- [1655] K. Ziętak. Properties of the  $l_1$ -solutions of the linear matrix equation  $AX + YB = C$ . *IMA Journal of Numerical Analysis*, 7(2):223–233, 1987. CODEN

IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Zietak:1989:PAM**

- [1656] K. Ziętak. Properties of the approximations of a matrix which lower its rank. *IMA Journal of Numerical Analysis*, 9(4):545–554, 1989. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

**Zubik-Kowal:1997:MLP**

- [1657] Barbara Zubik-Kowal. The method of lines for parabolic differential-functional equations. *IMA Journal of Numerical Analysis*, 17(1):103–123, January 1997. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_17/Issue\\_01/170103.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_17/Issue_01/170103.sgm.abs.html).

**Zvan:2001:FVA**

- [1658] R. Zvan, P. A. Forsyth, and K. R. Vetzal. A finite volume approach for contingent claims valuation. *IMA Journal of Numerical Analysis*, 21(3):703–731, July 2001. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_03/210703.sgm.abs.html](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_03/210703.sgm.abs.html); [http://www3.oup.co.uk/imanum/hdb/Volume\\_21/Issue\\_03/pdf/210703.pdf](http://www3.oup.co.uk/imanum/hdb/Volume_21/Issue_03/pdf/210703.pdf).